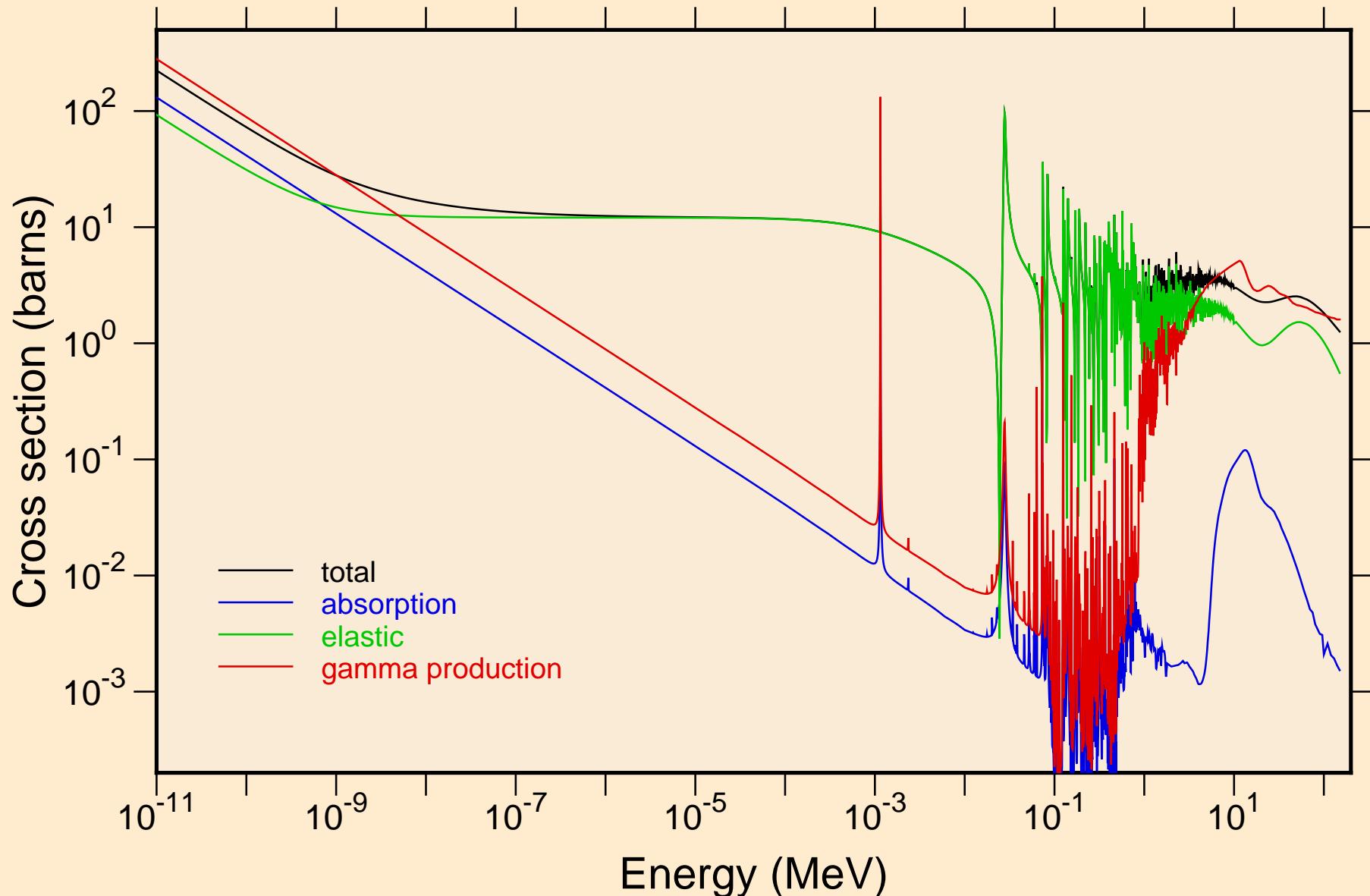


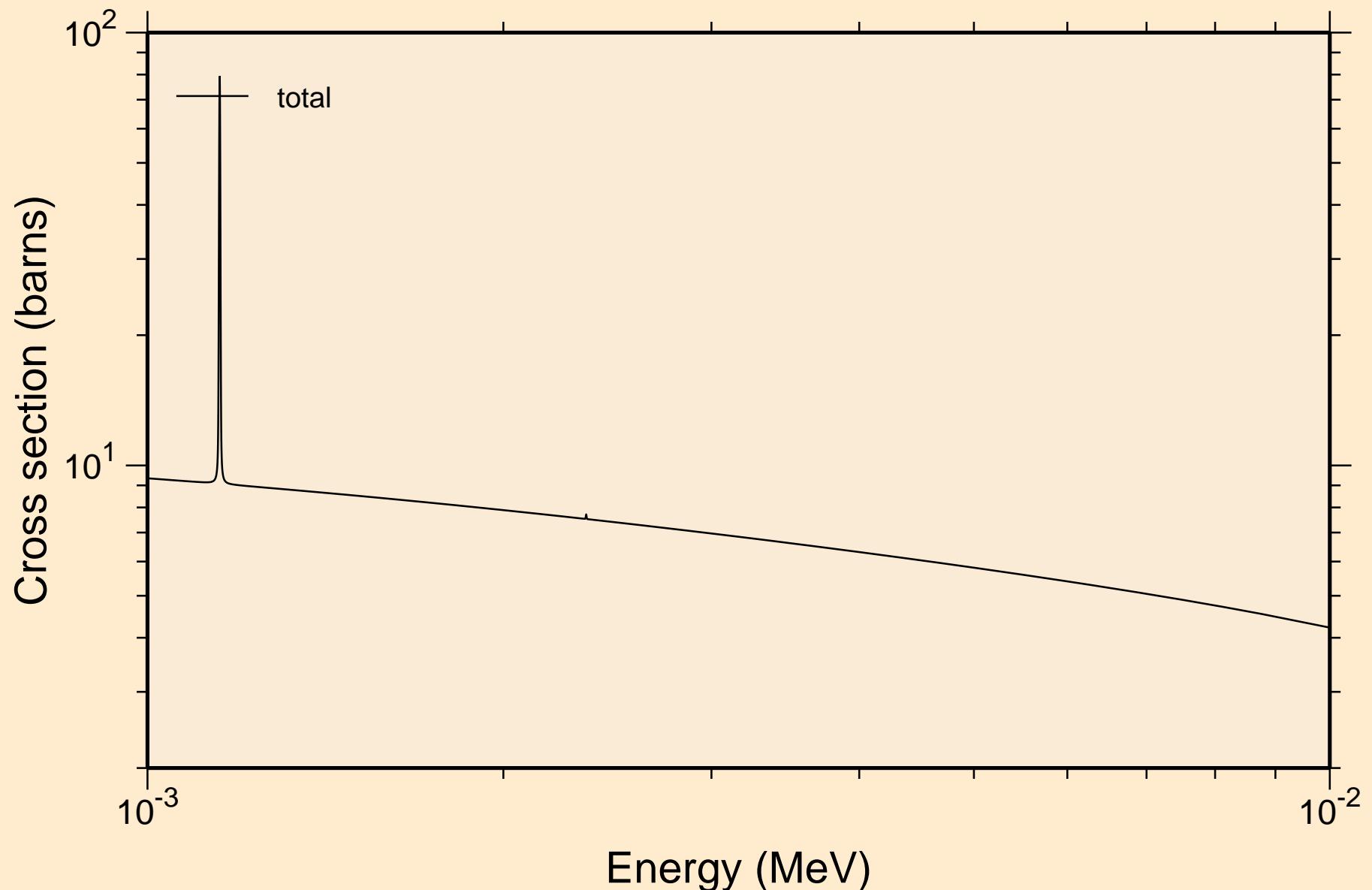
# ADVANCE CALCULATIONS

## Principal cross sections



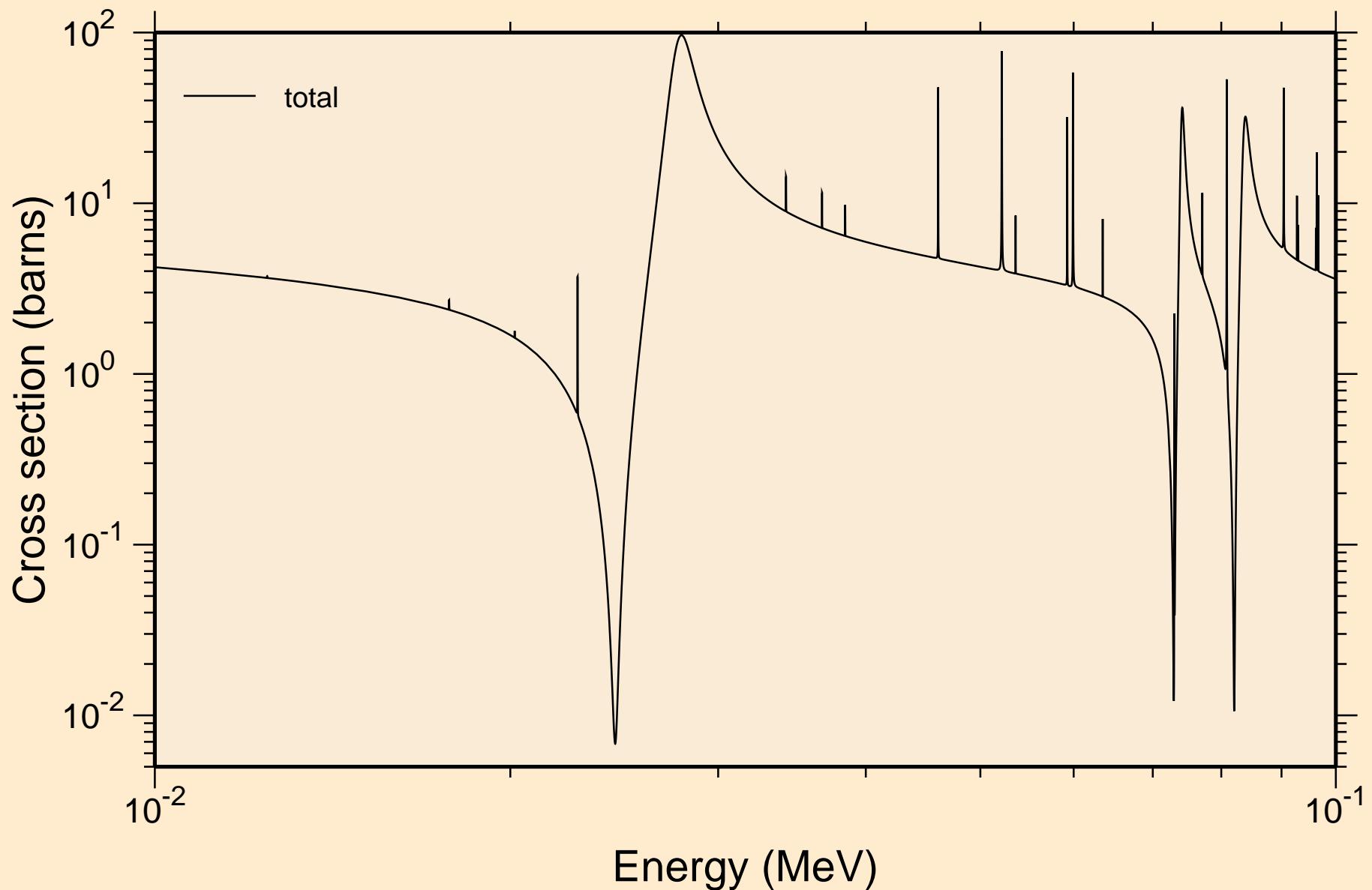
# ADVANCE CALCULATIONS

## resonance total cross section



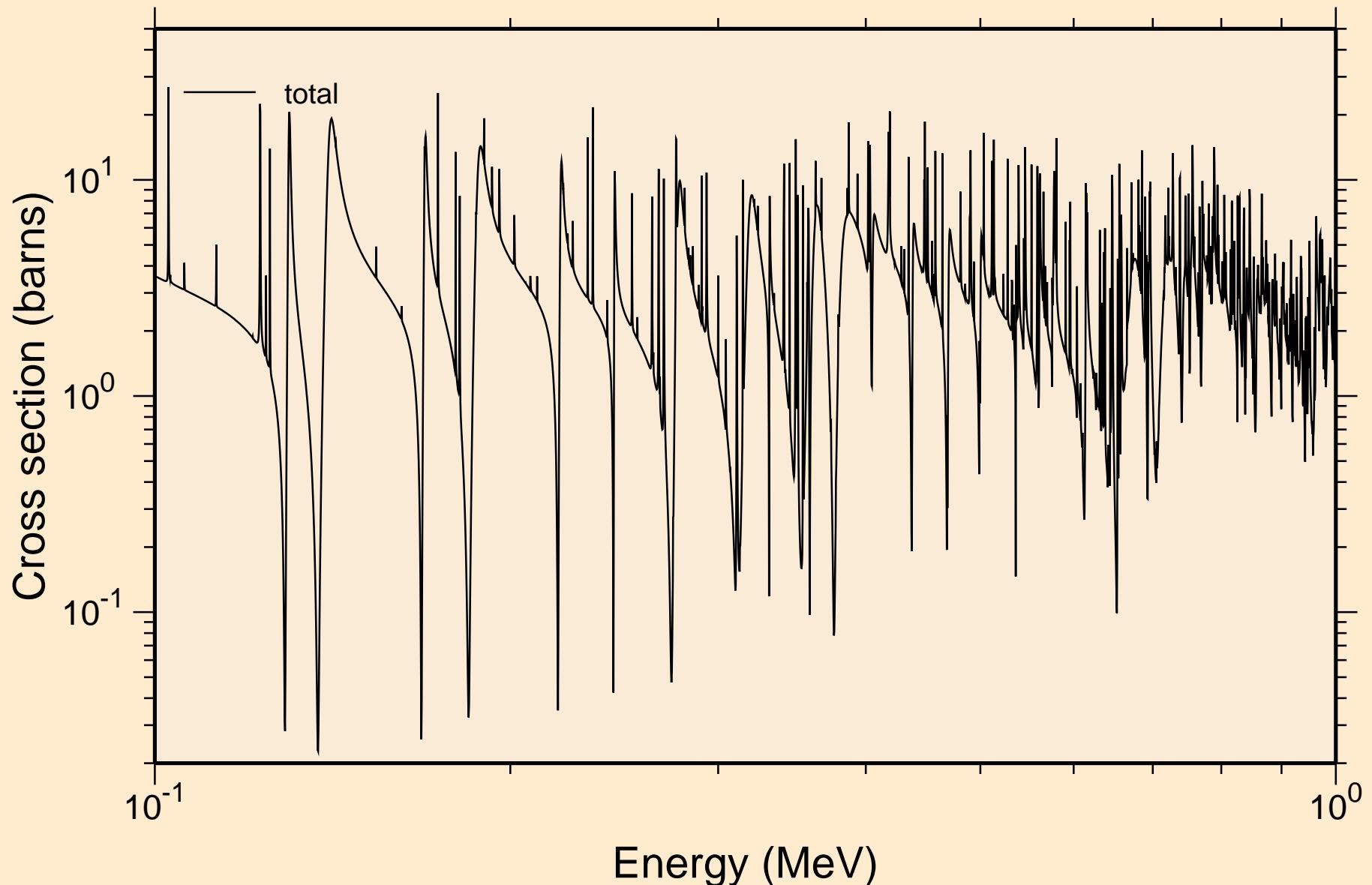
# ADVANCE CALCULATIONS

## resonance total cross section



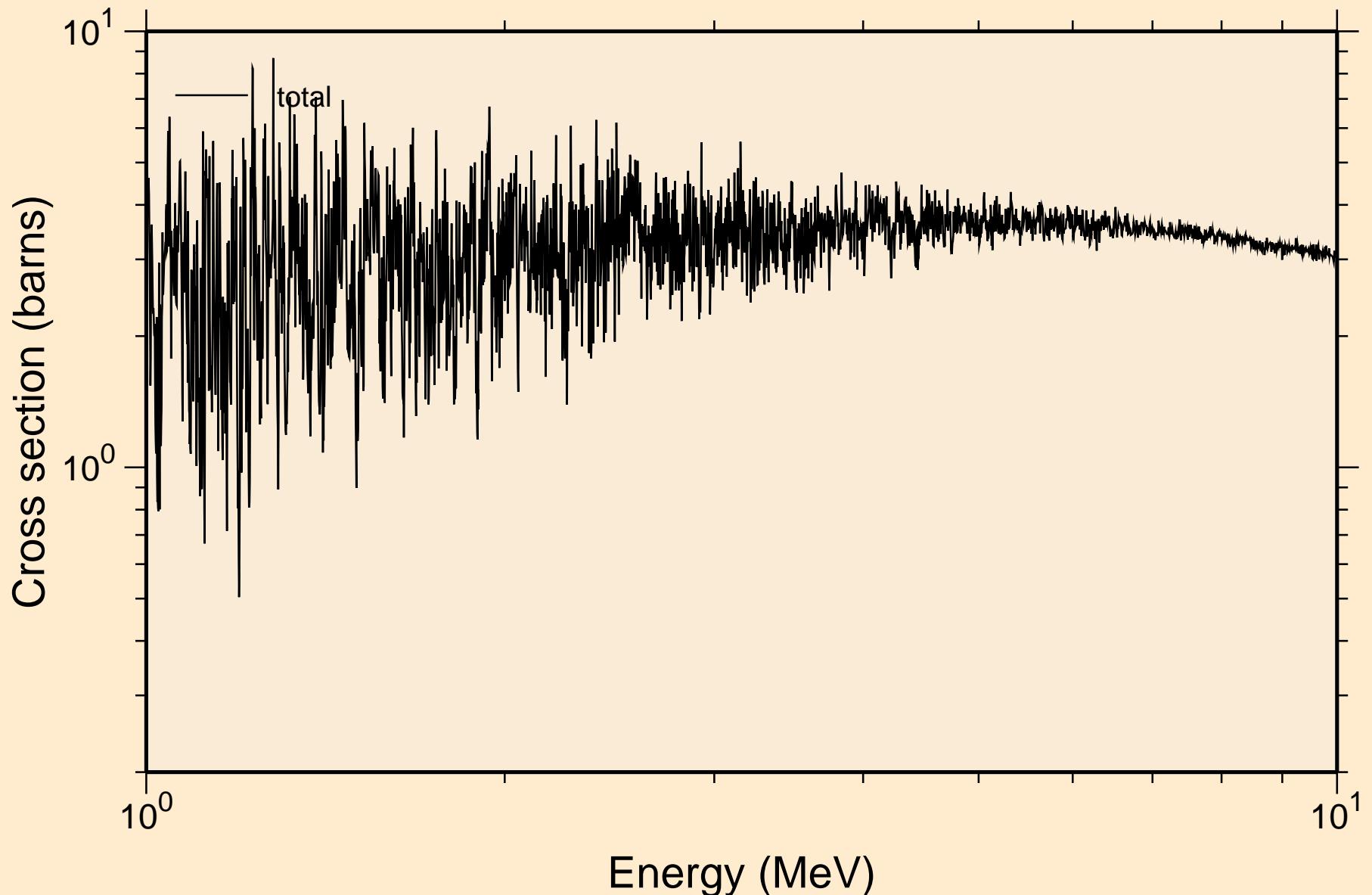
# ADVANCE CALCULATIONS

## resonance total cross section



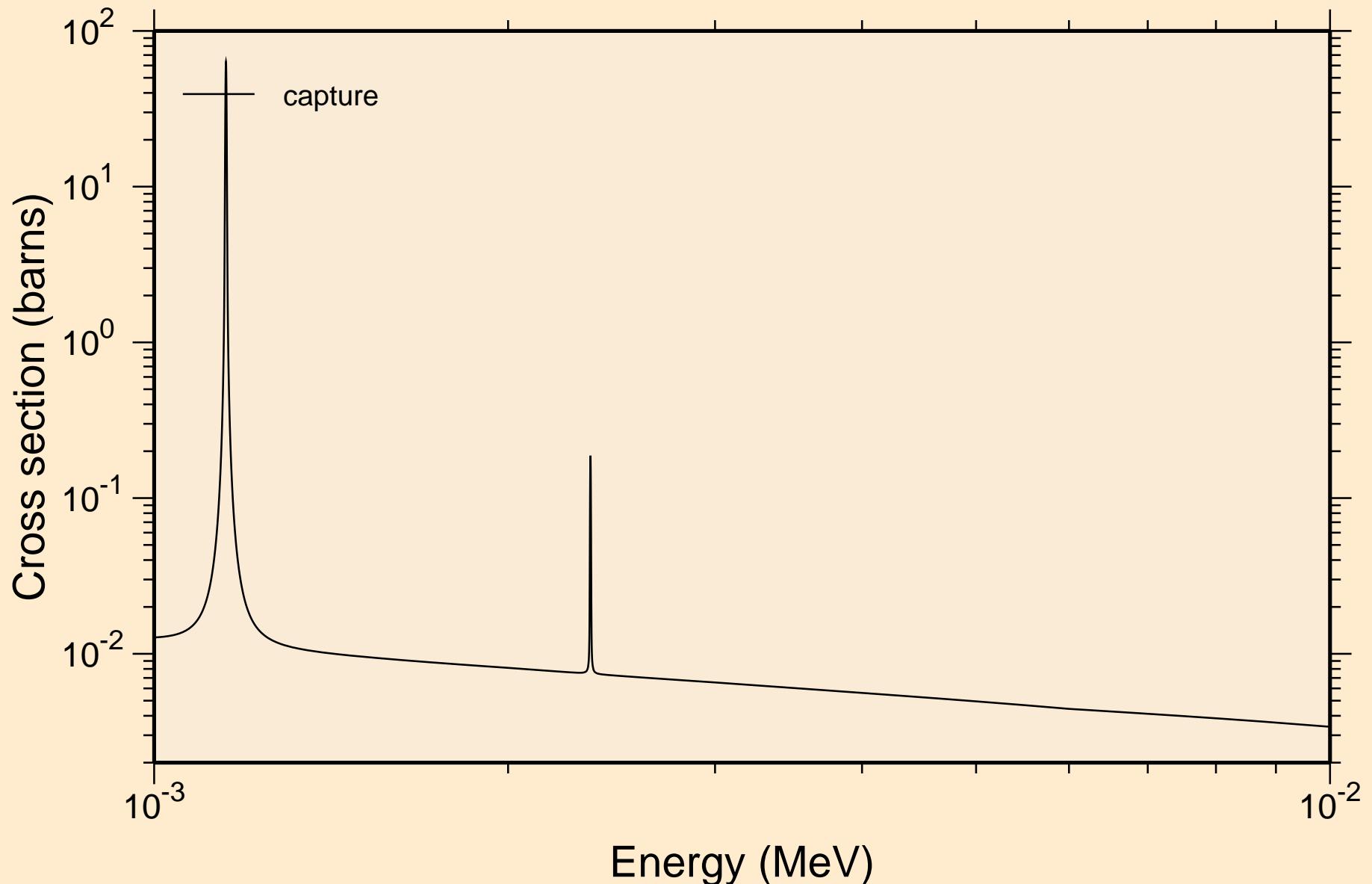
# ADVANCE CALCULATIONS

## resonance total cross section



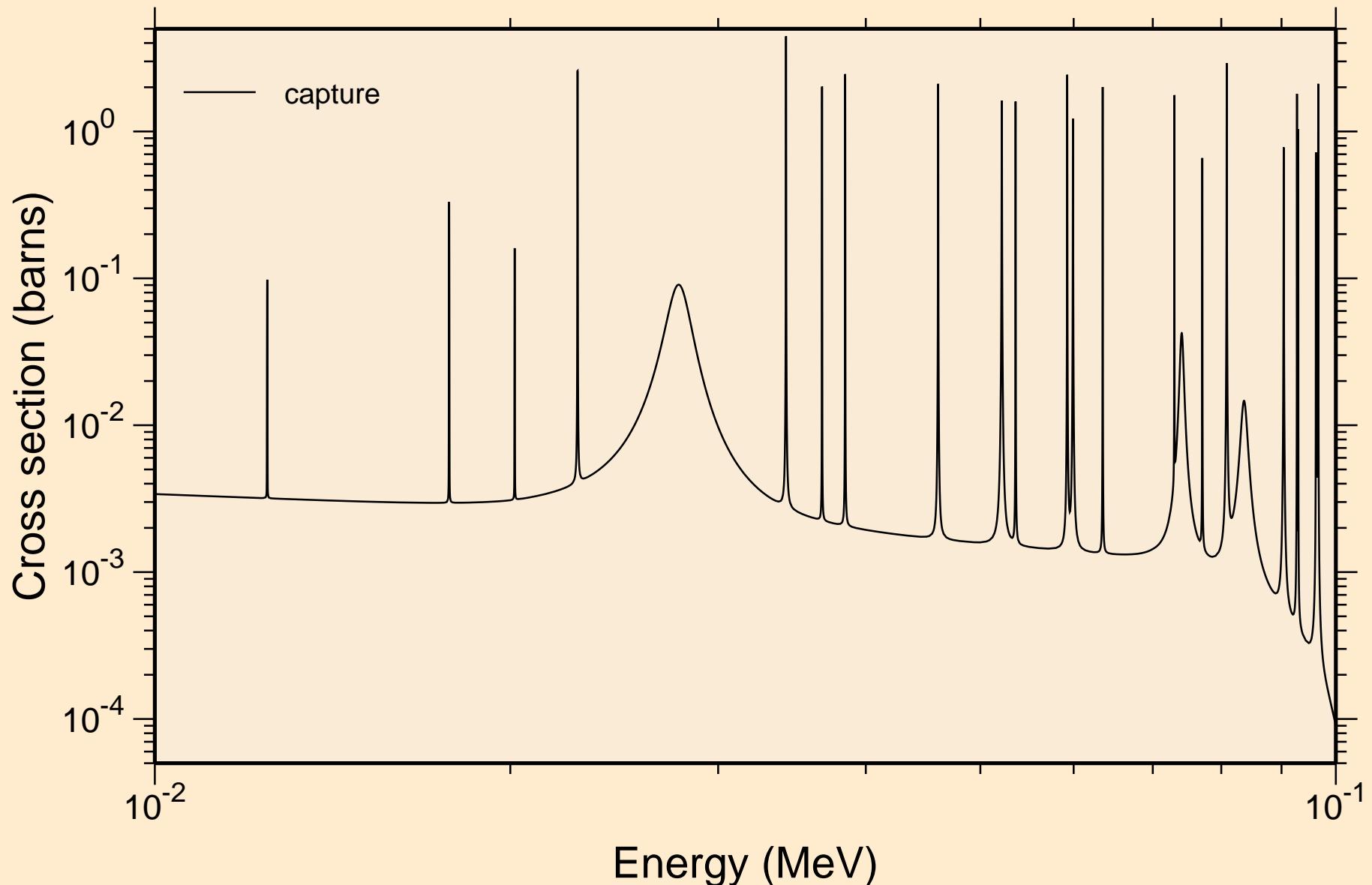
# ADVANCE CALCULATIONS

## resonance absorption cross sections



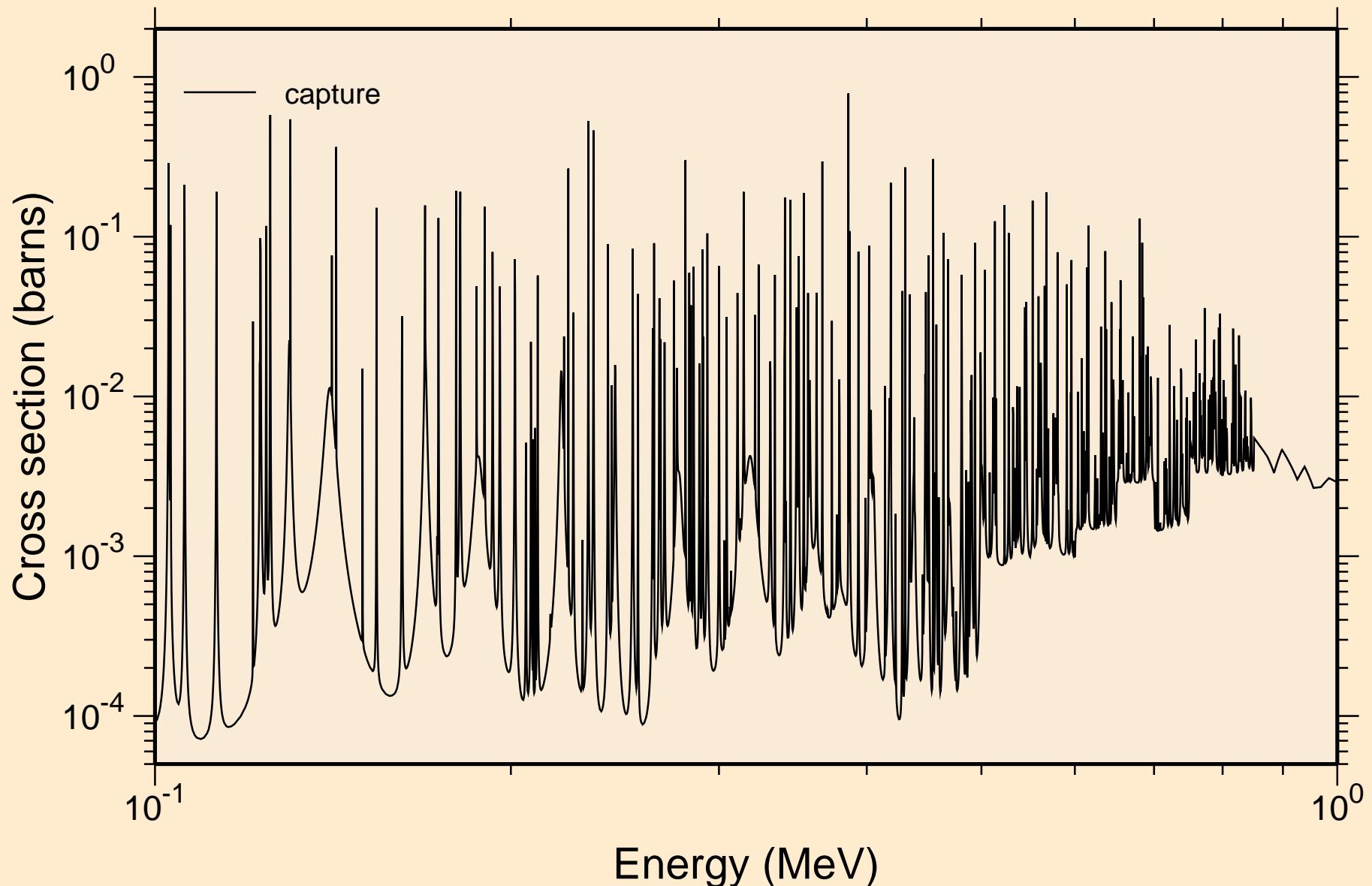
# ADVANCE CALCULATIONS

## resonance absorption cross sections



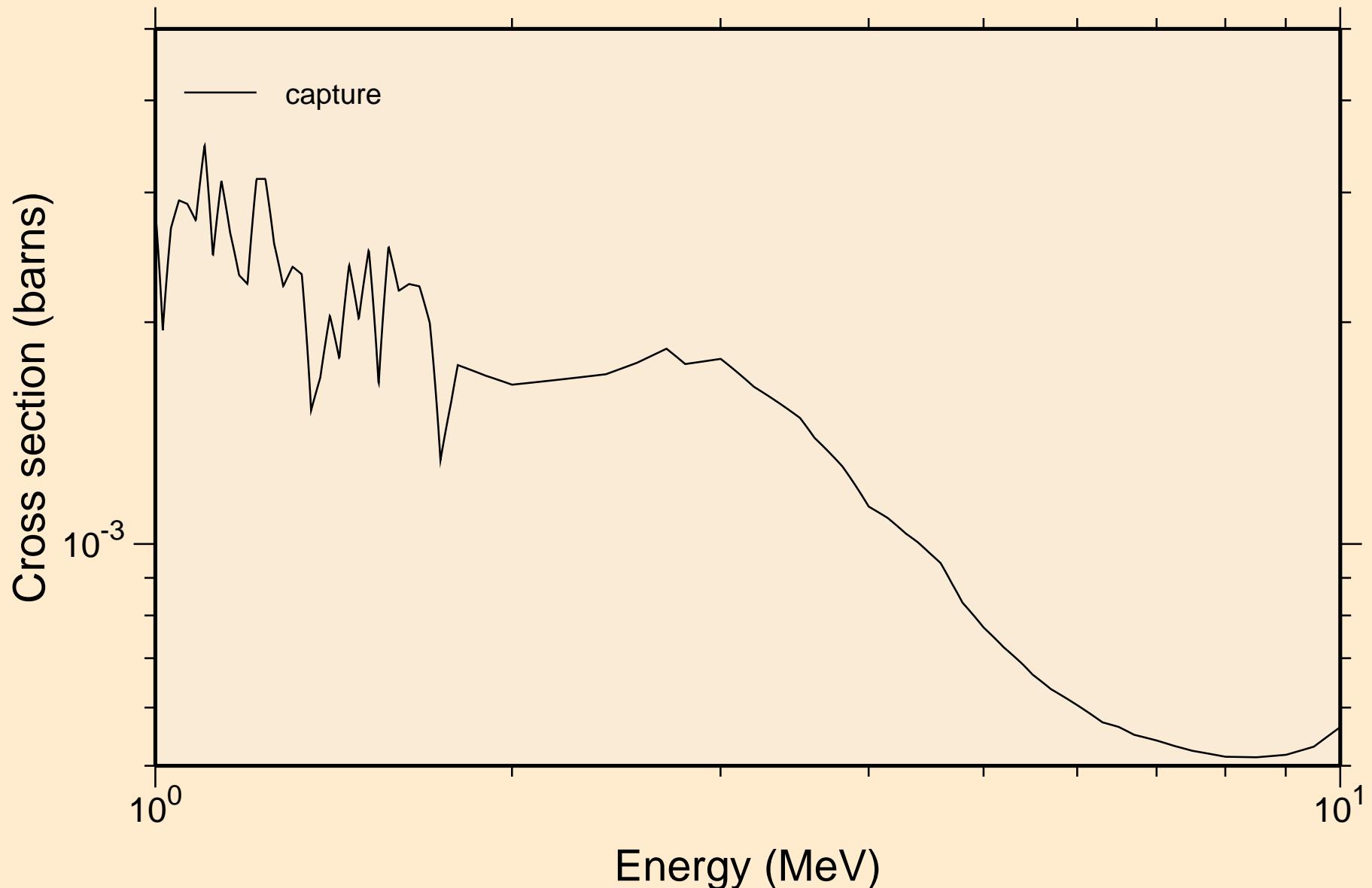
# ADVANCE CALCULATIONS

## resonance absorption cross sections



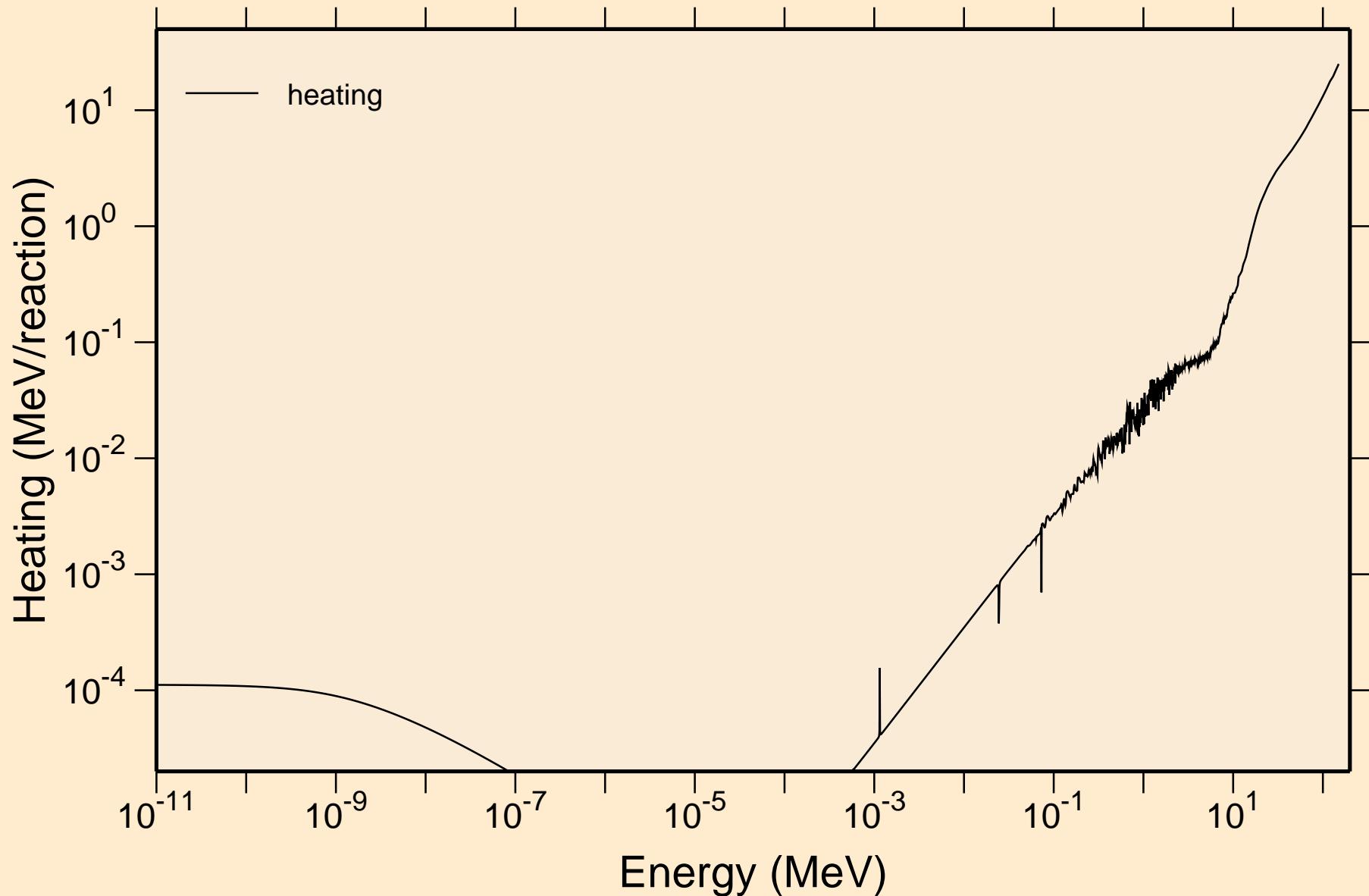
# ADVANCE CALCULATIONS

## resonance absorption cross sections



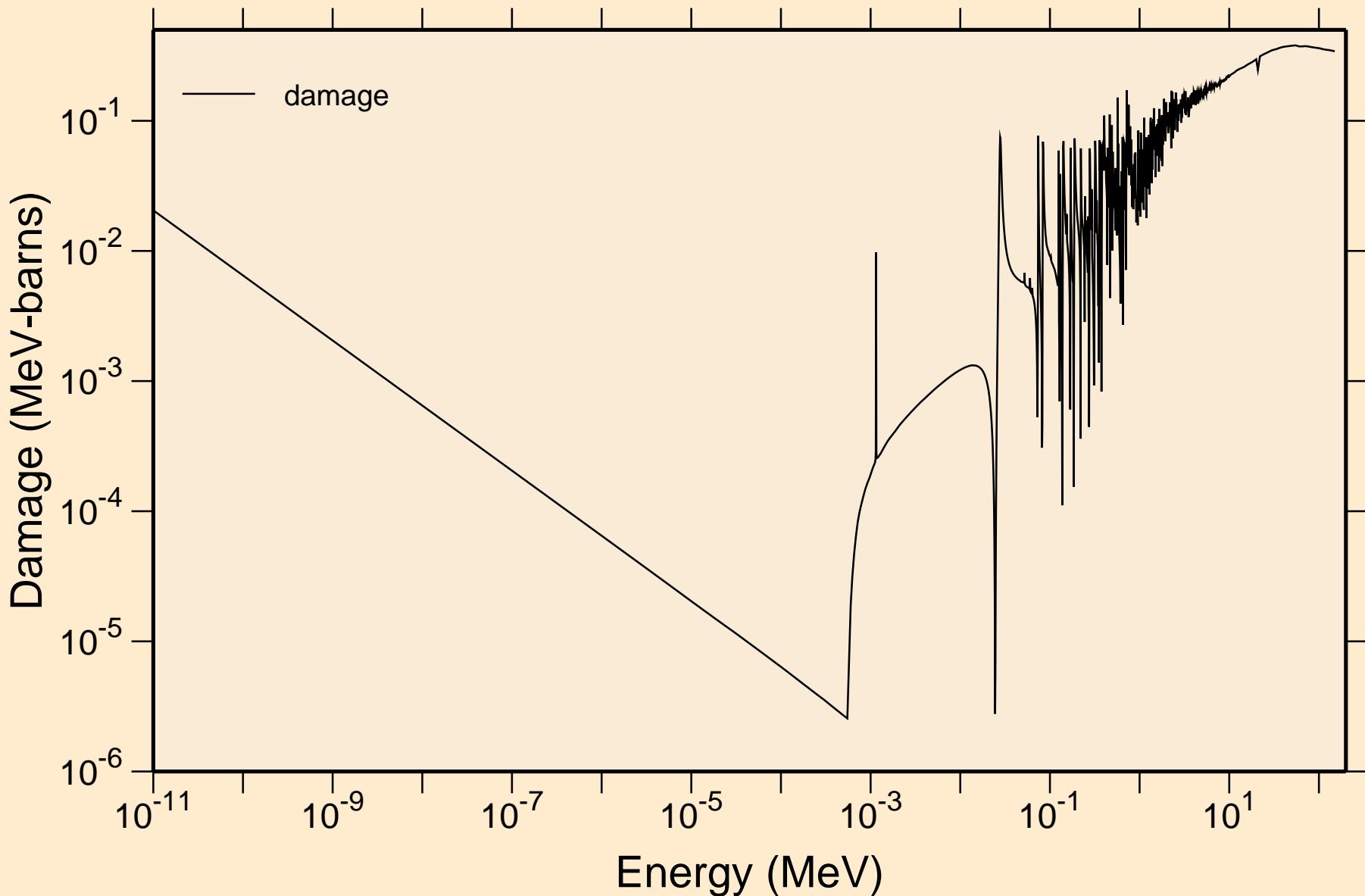
# ADVANCE CALCULATIONS

## Heating



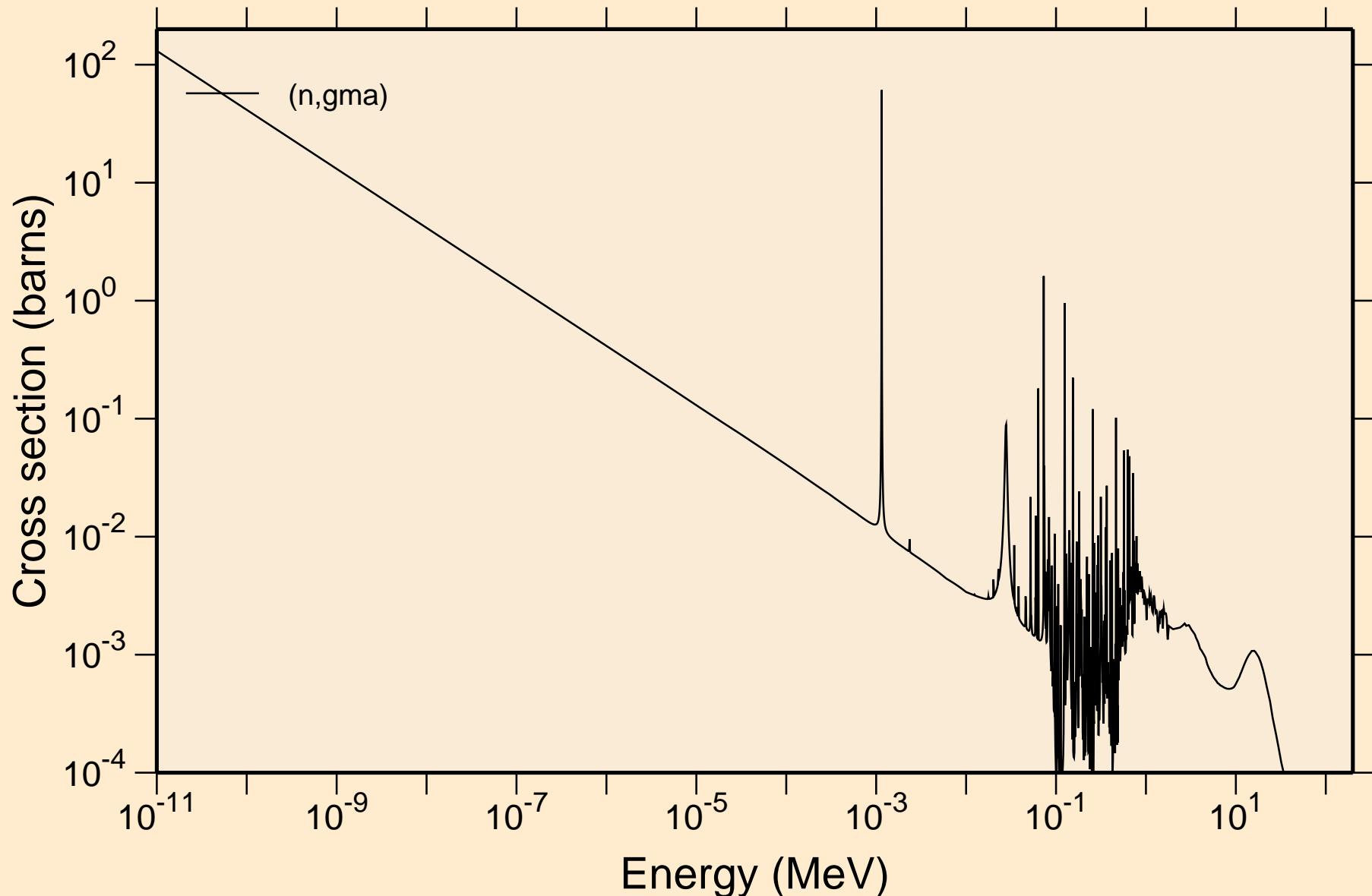
# ADVANCE CALCULATIONS

## Damage



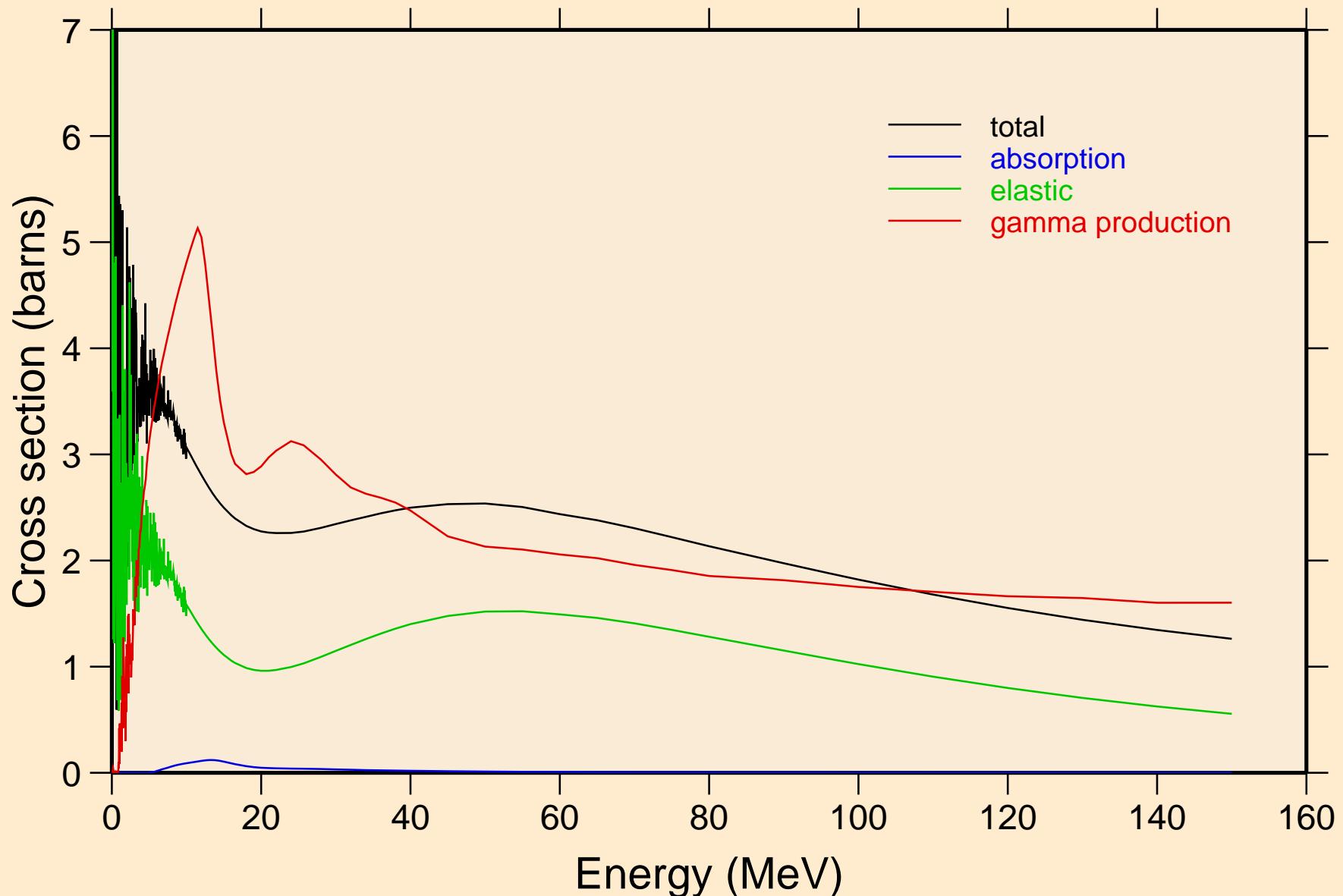
# ADVANCE CALCULATIONS

## Non-threshold reactions



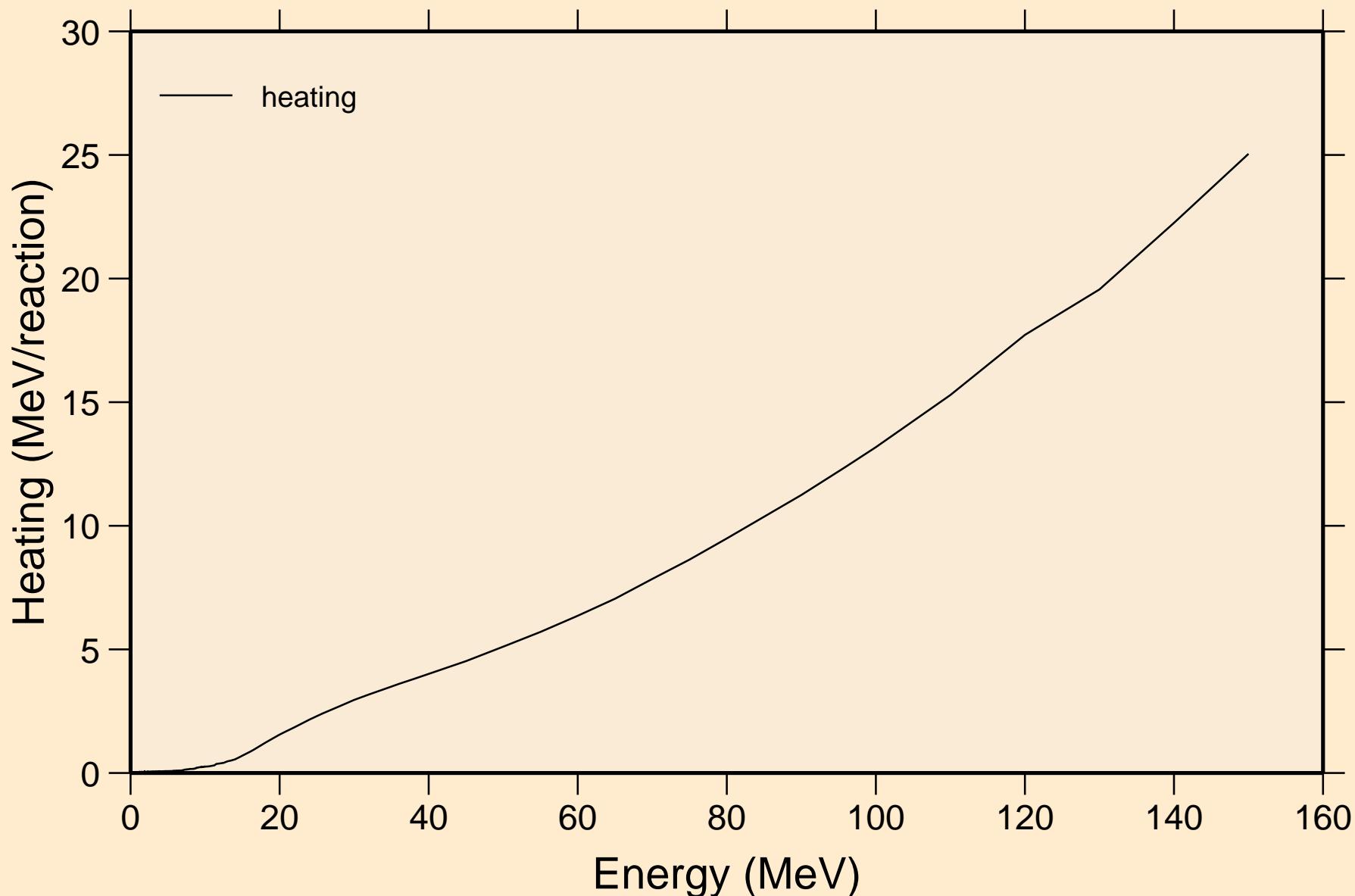
# ADVANCE CALCULATIONS

## Principal cross sections



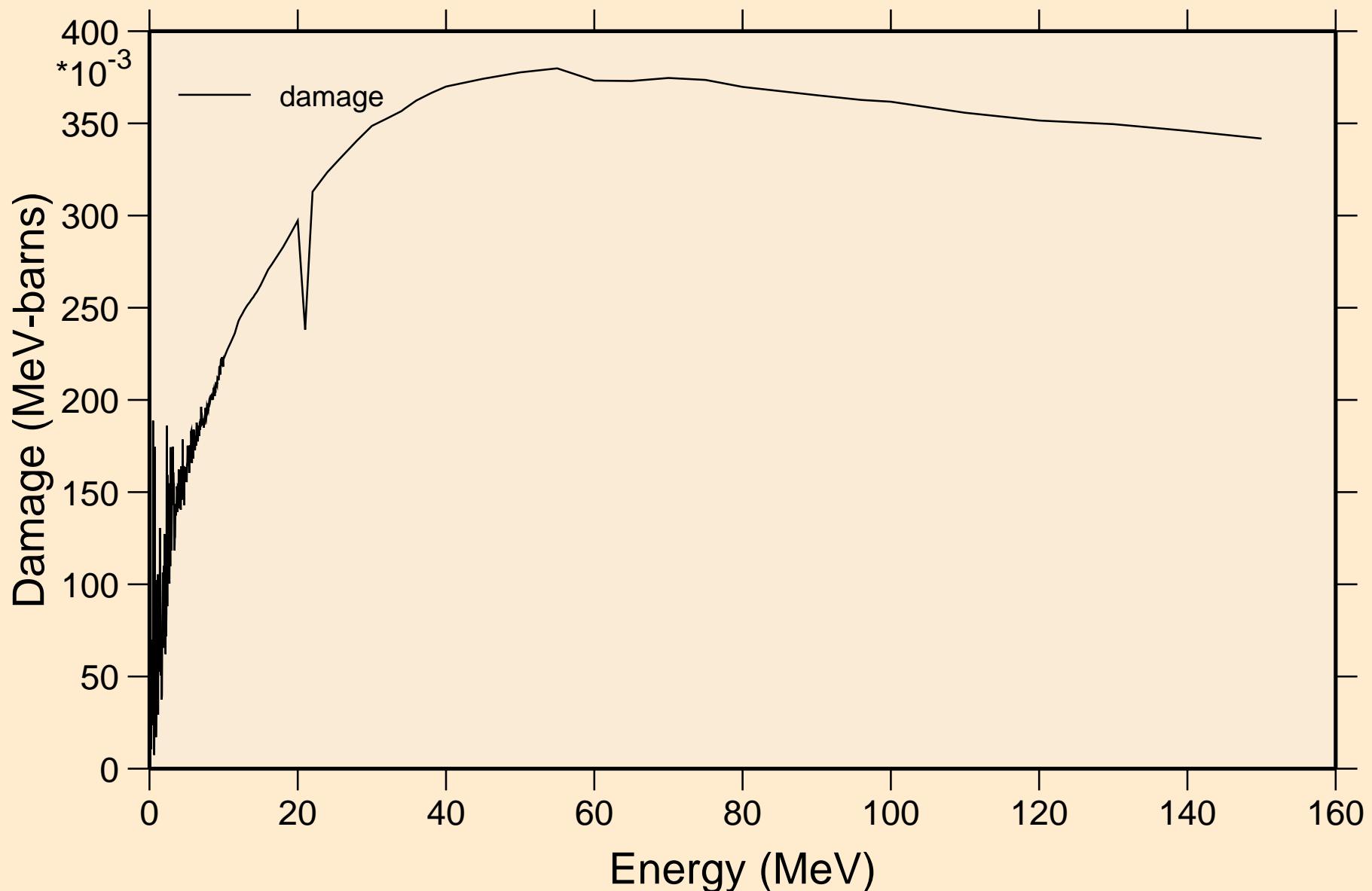
# ADVANCE CALCULATIONS

## Heating



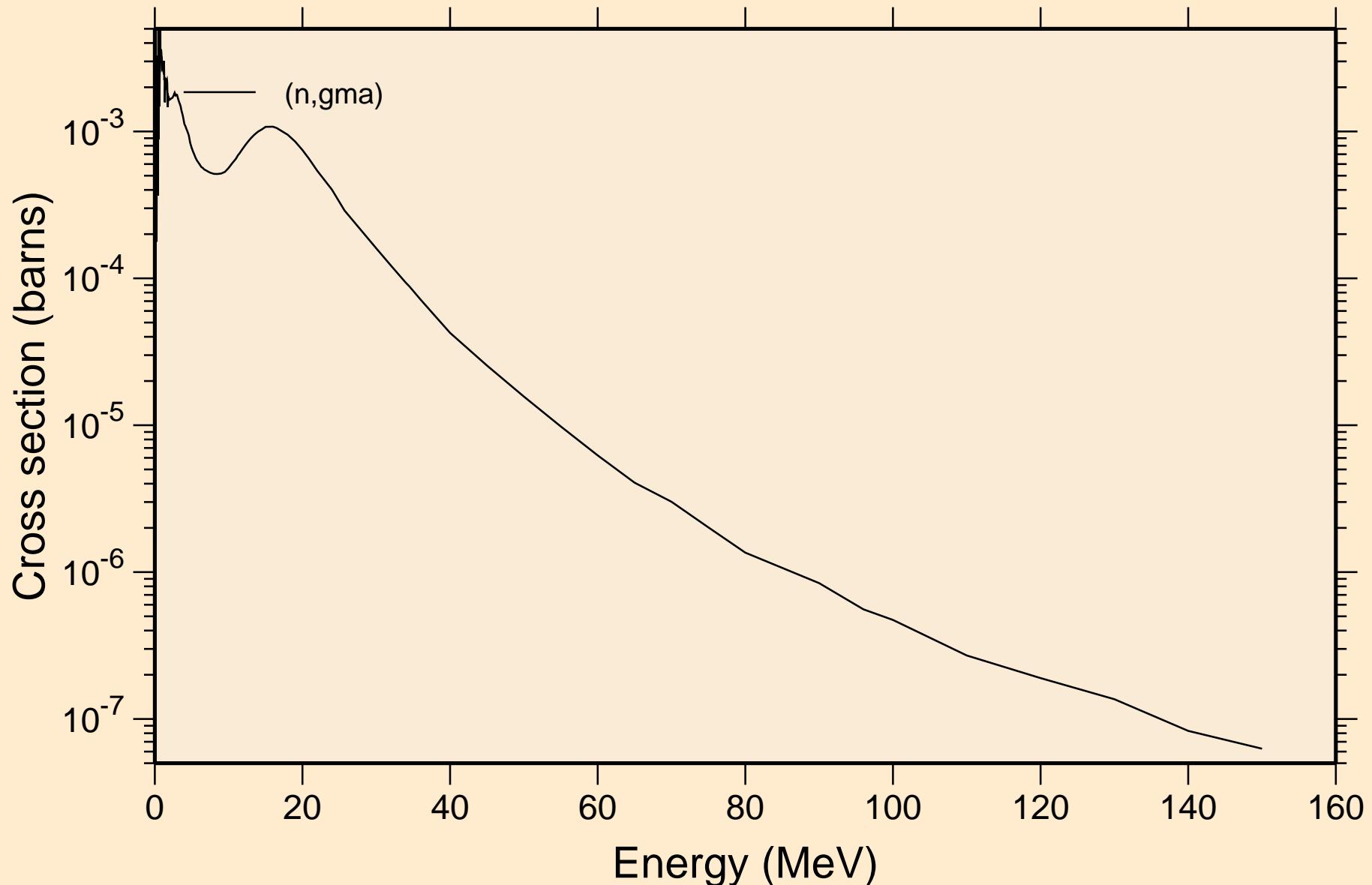
# ADVANCE CALCULATIONS

## Damage



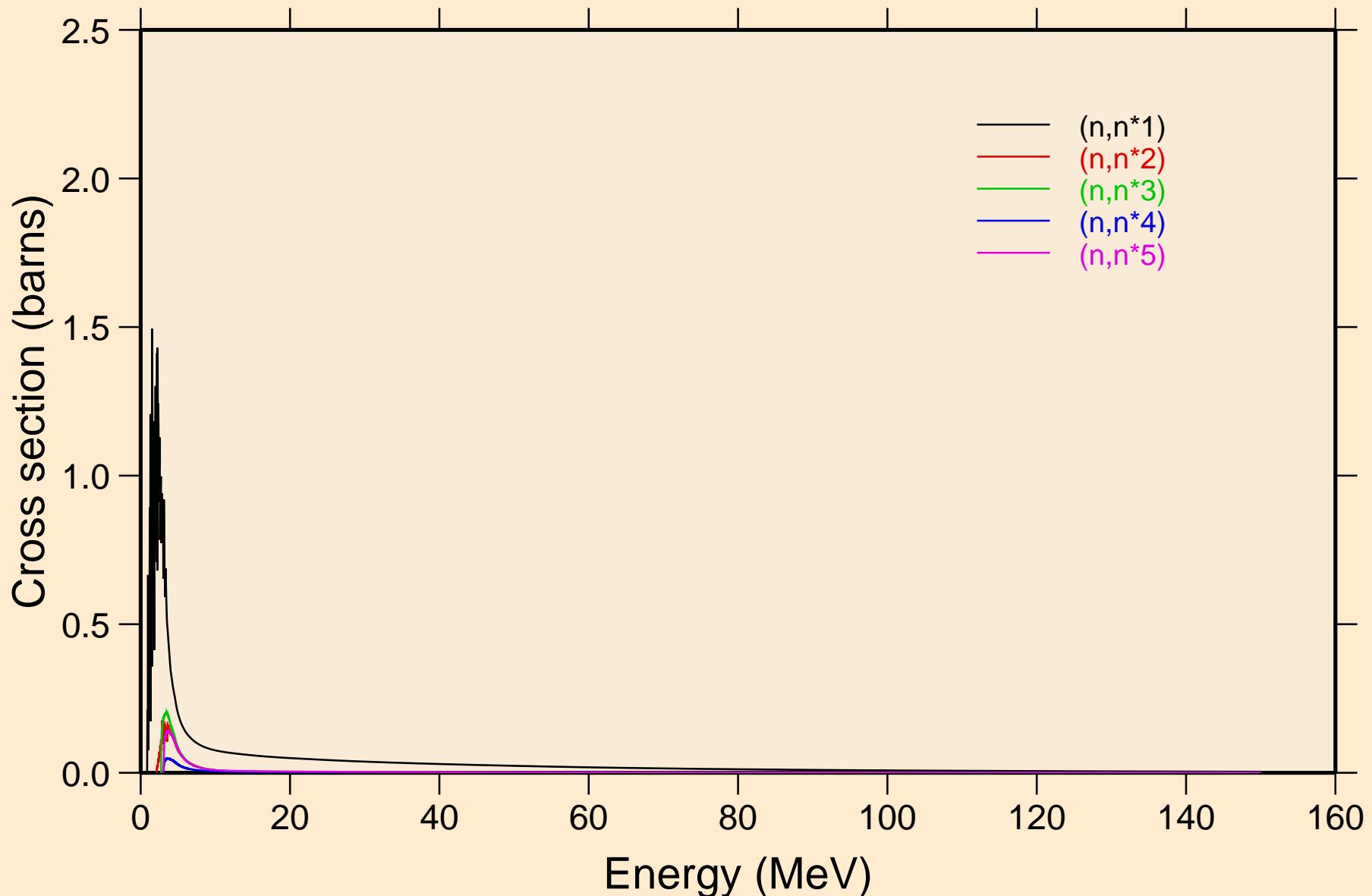
# ADVANCE CALCULATIONS

## Non-threshold reactions



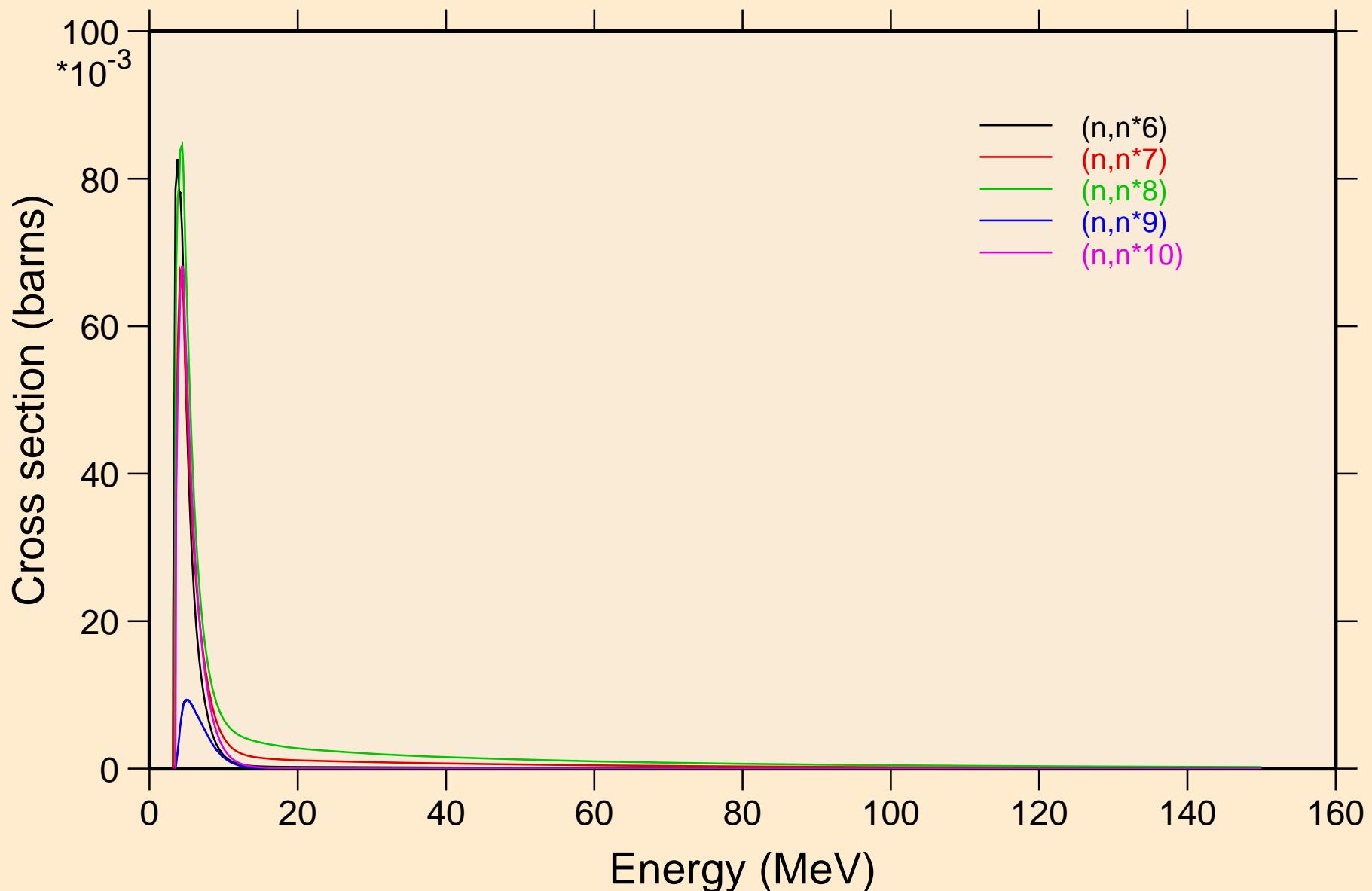
# ADVANCE CALCULATIONS

## Inelastic levels



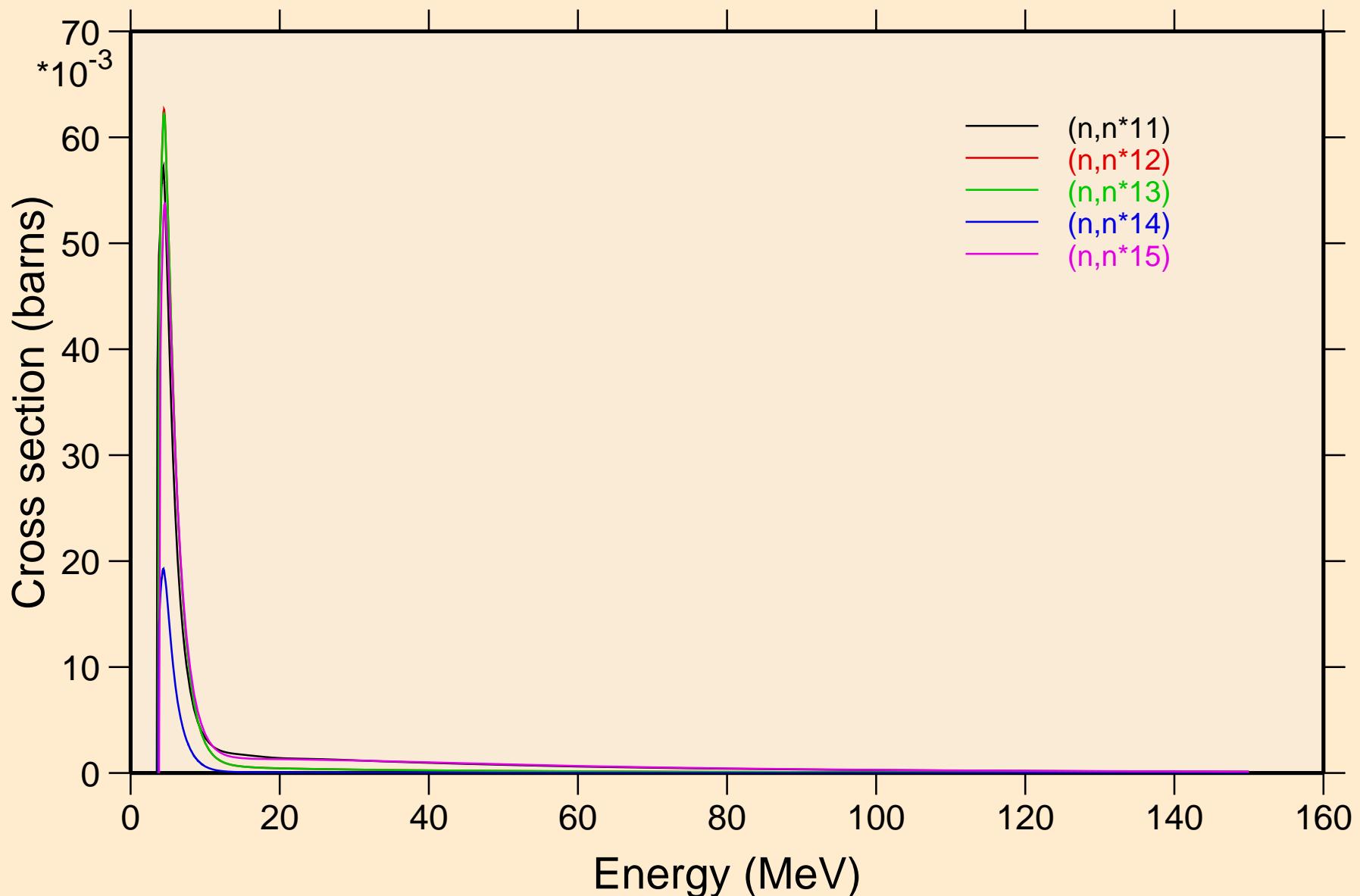
# ADVANCE CALCULATIONS

## Inelastic levels



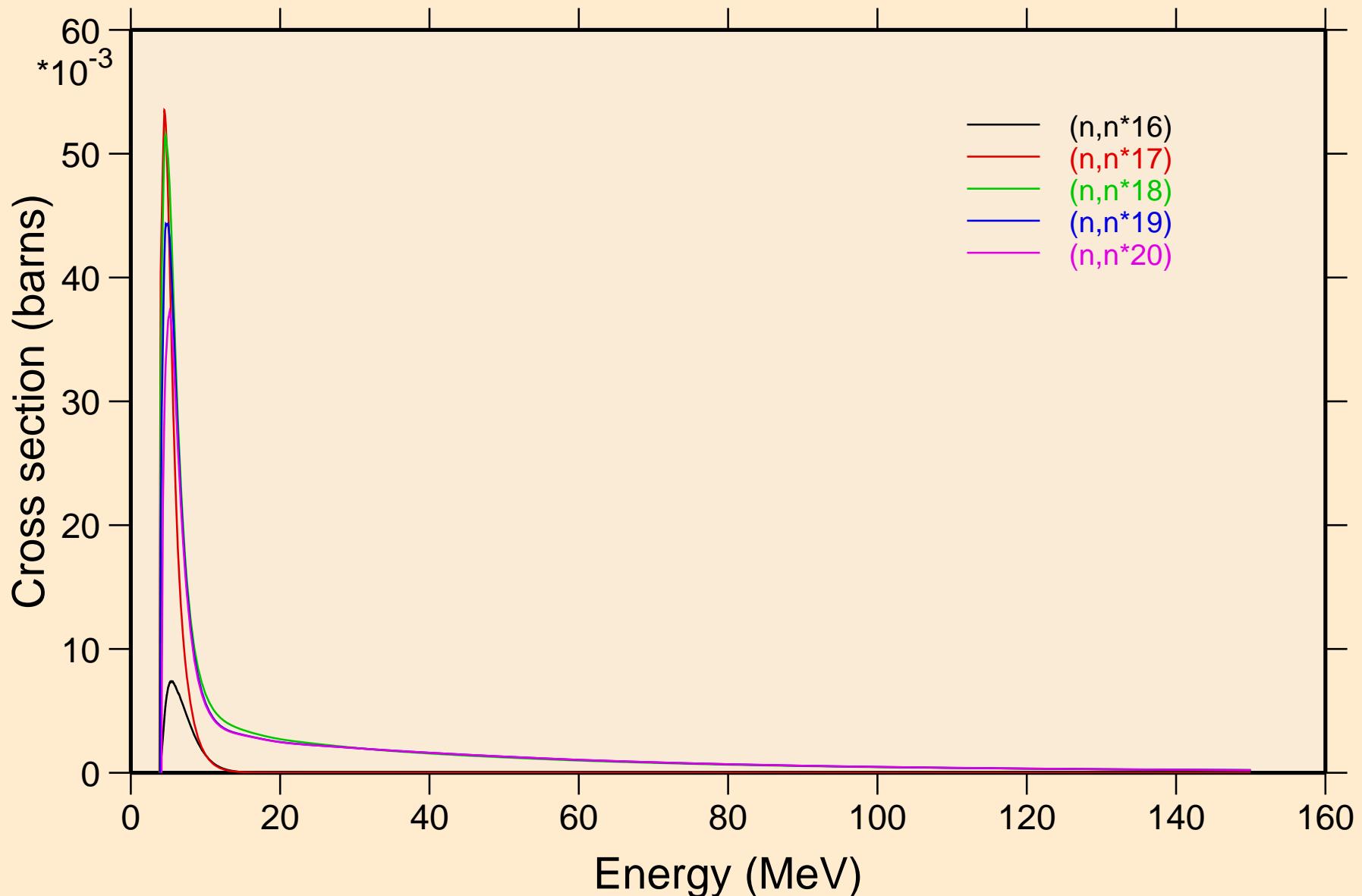
# ADVANCE CALCULATIONS

## Inelastic levels



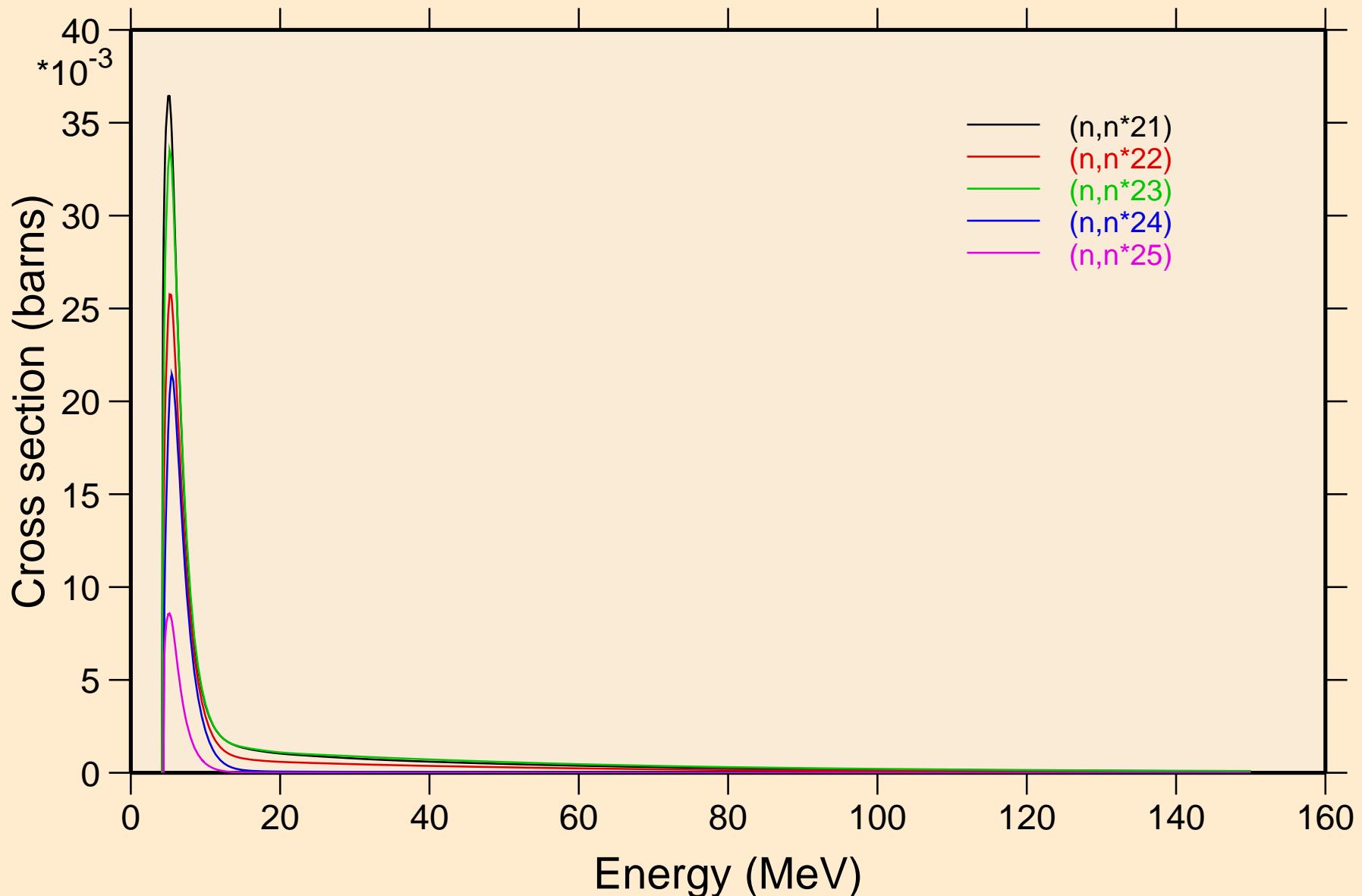
# ADVANCE CALCULATIONS

## Inelastic levels



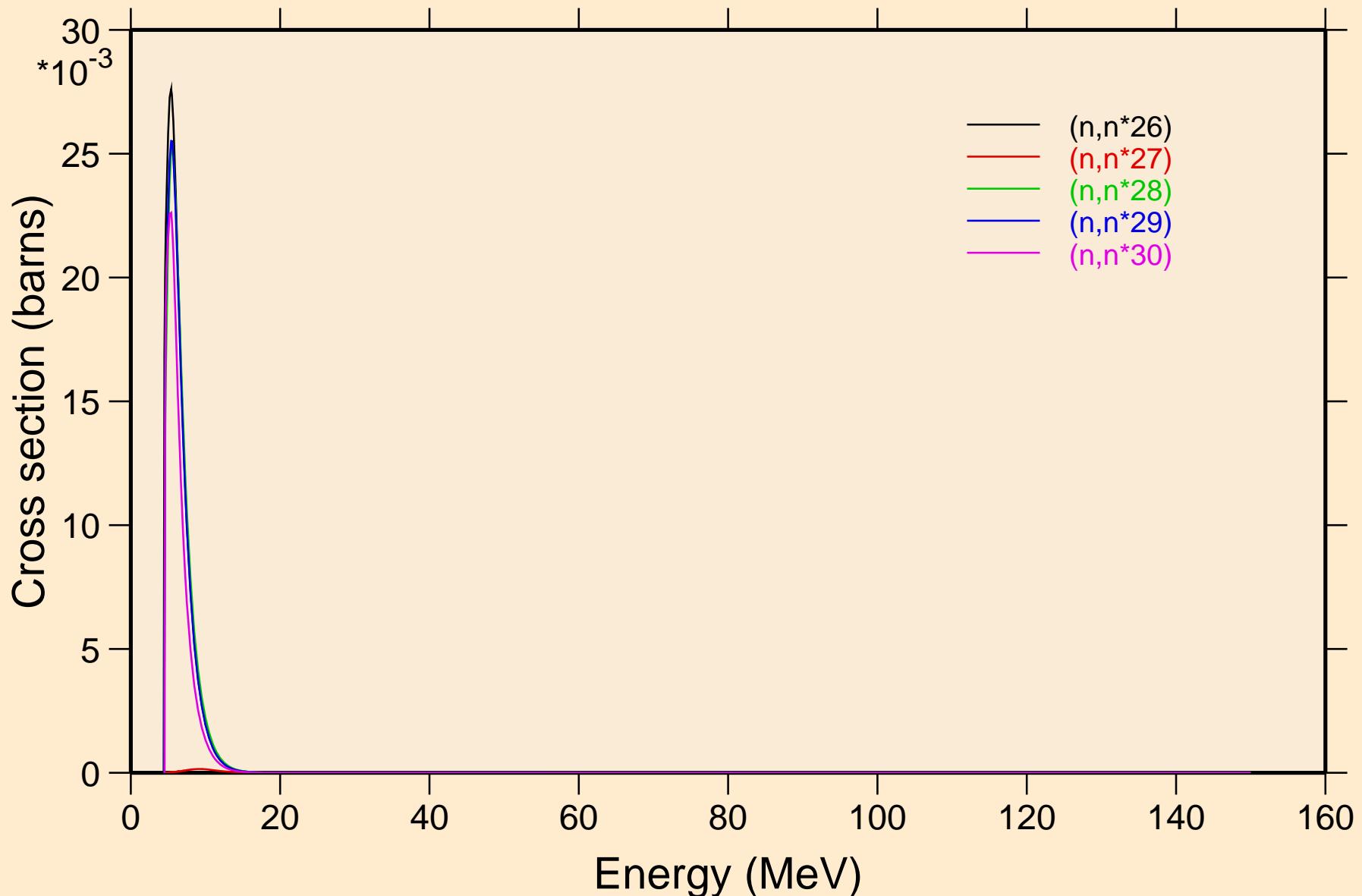
# ADVANCE CALCULATIONS

## Inelastic levels



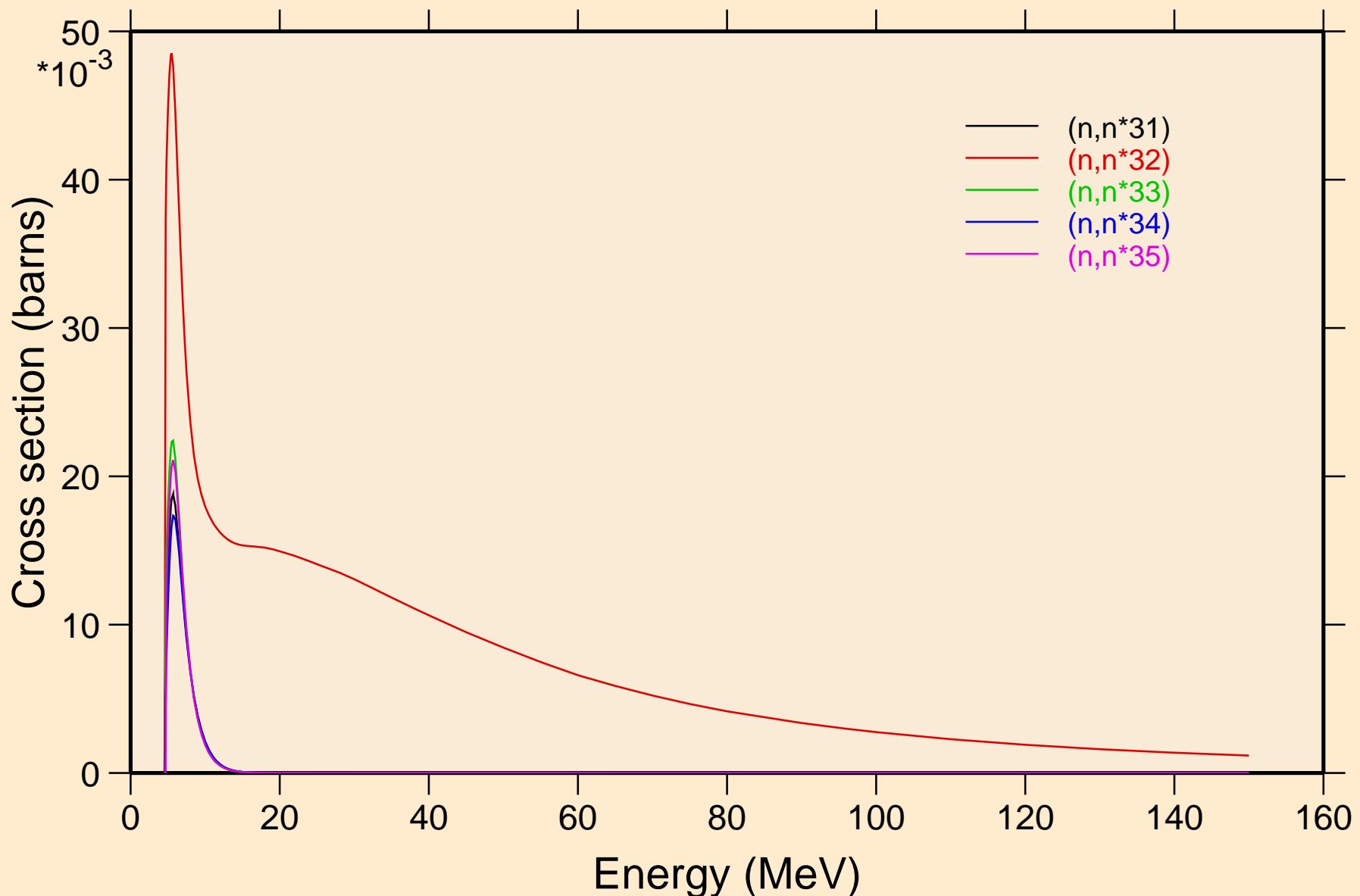
# ADVANCE CALCULATIONS

## Inelastic levels



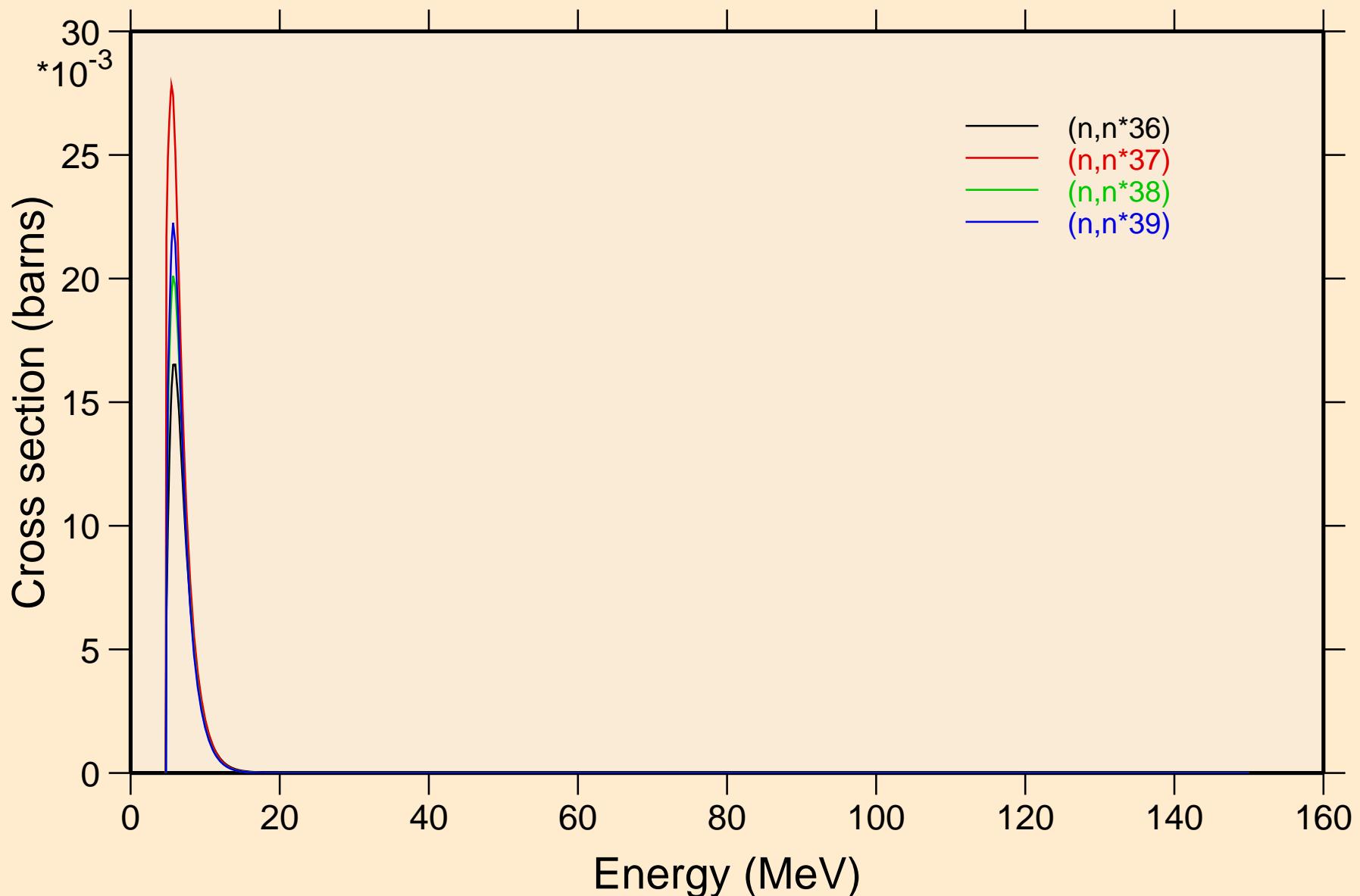
# ADVANCE CALCULATIONS

## Inelastic levels



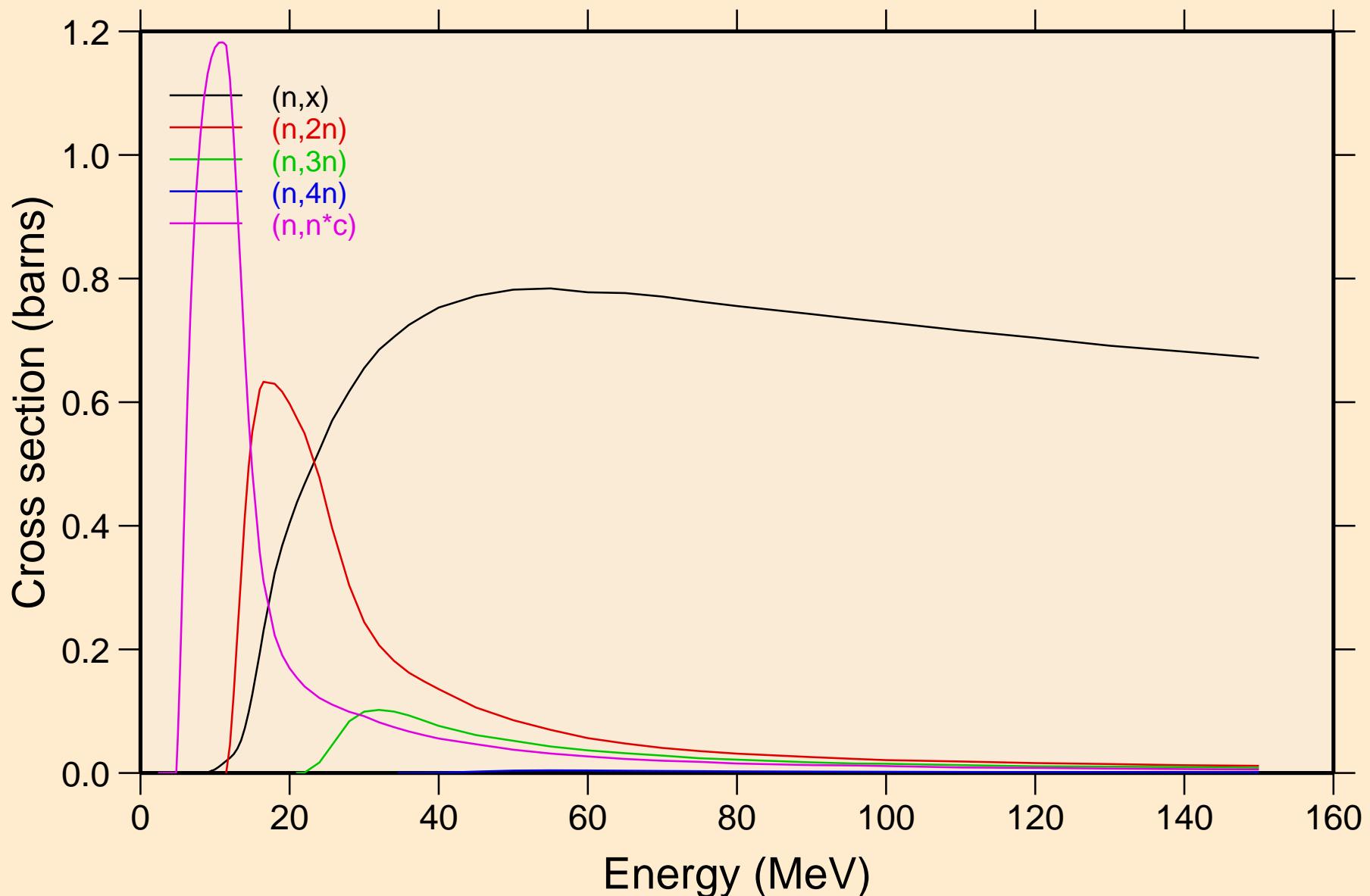
# ADVANCE CALCULATIONS

## Inelastic levels



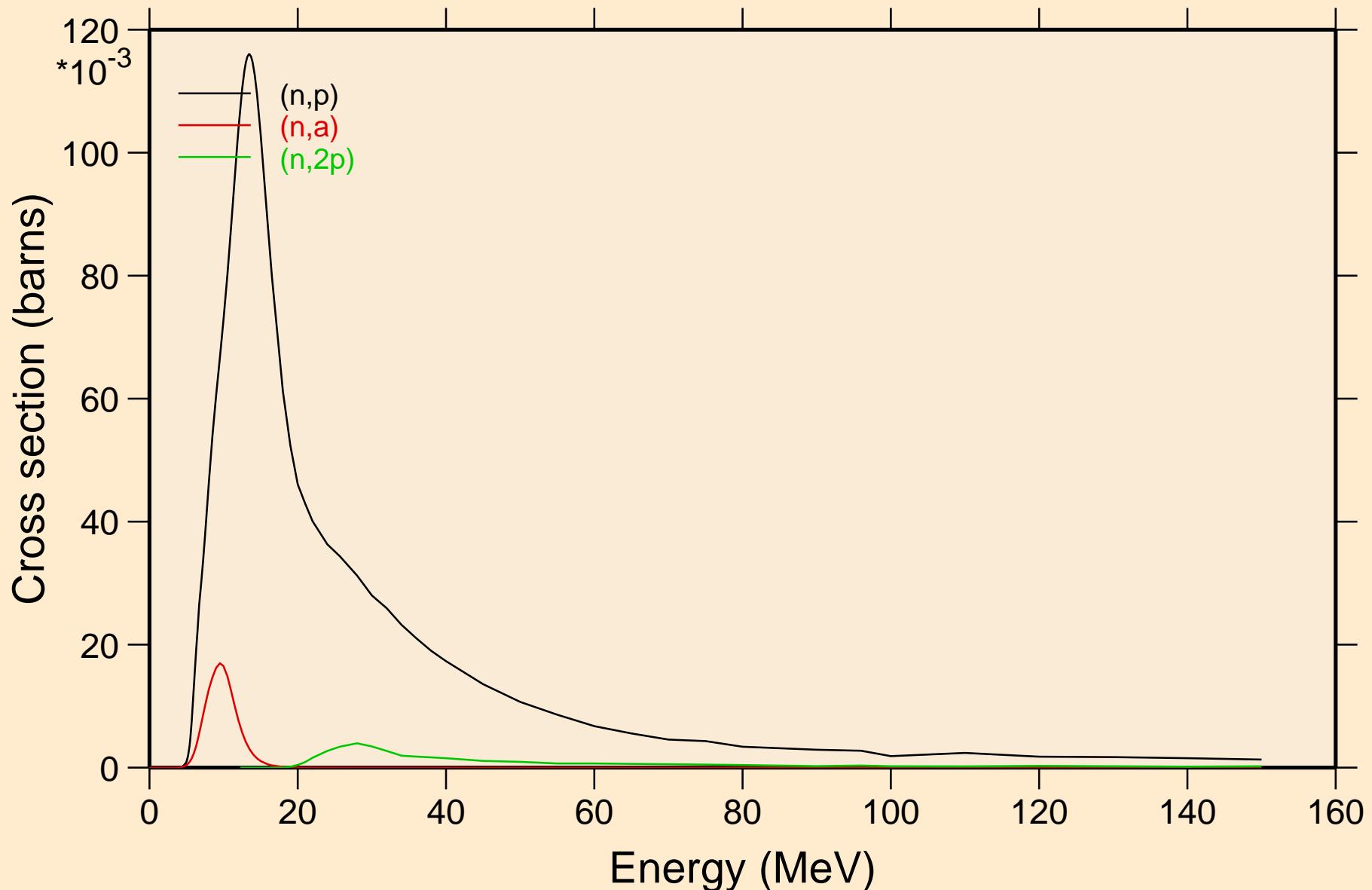
# ADVANCE CALCULATIONS

## Threshold reactions



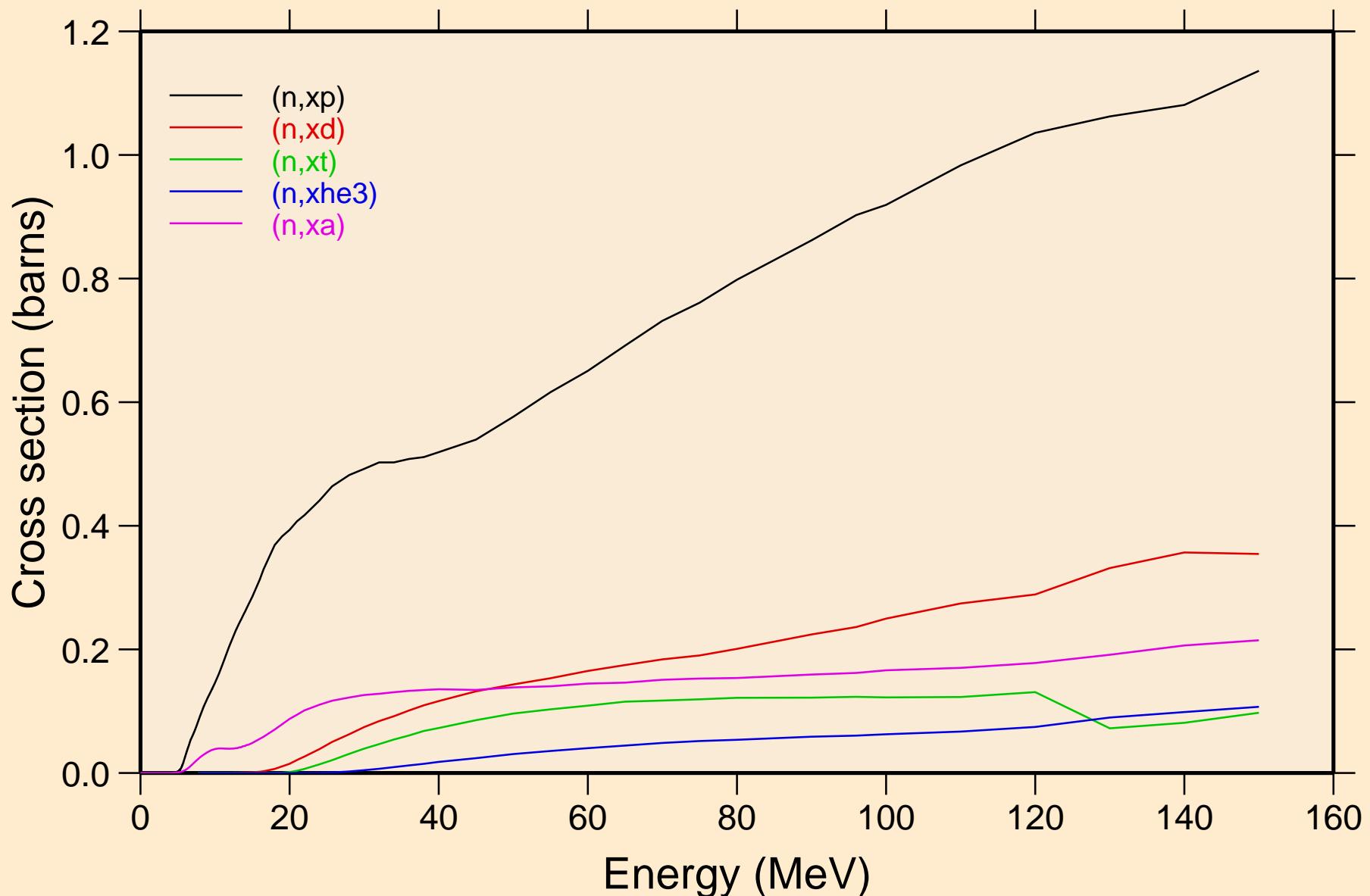
# ADVANCE CALCULATIONS

## Threshold reactions



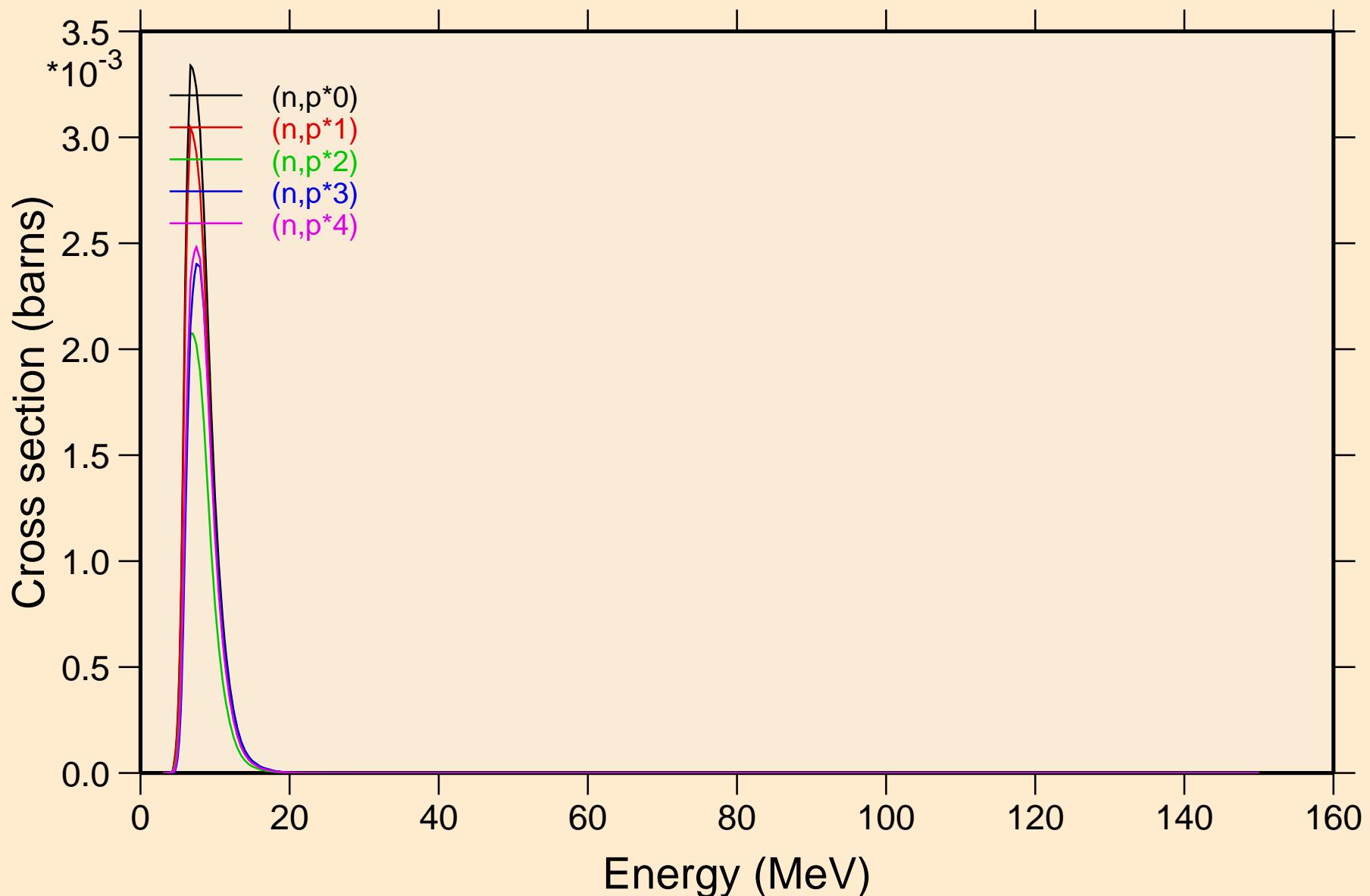
# ADVANCE CALCULATIONS

## Threshold reactions



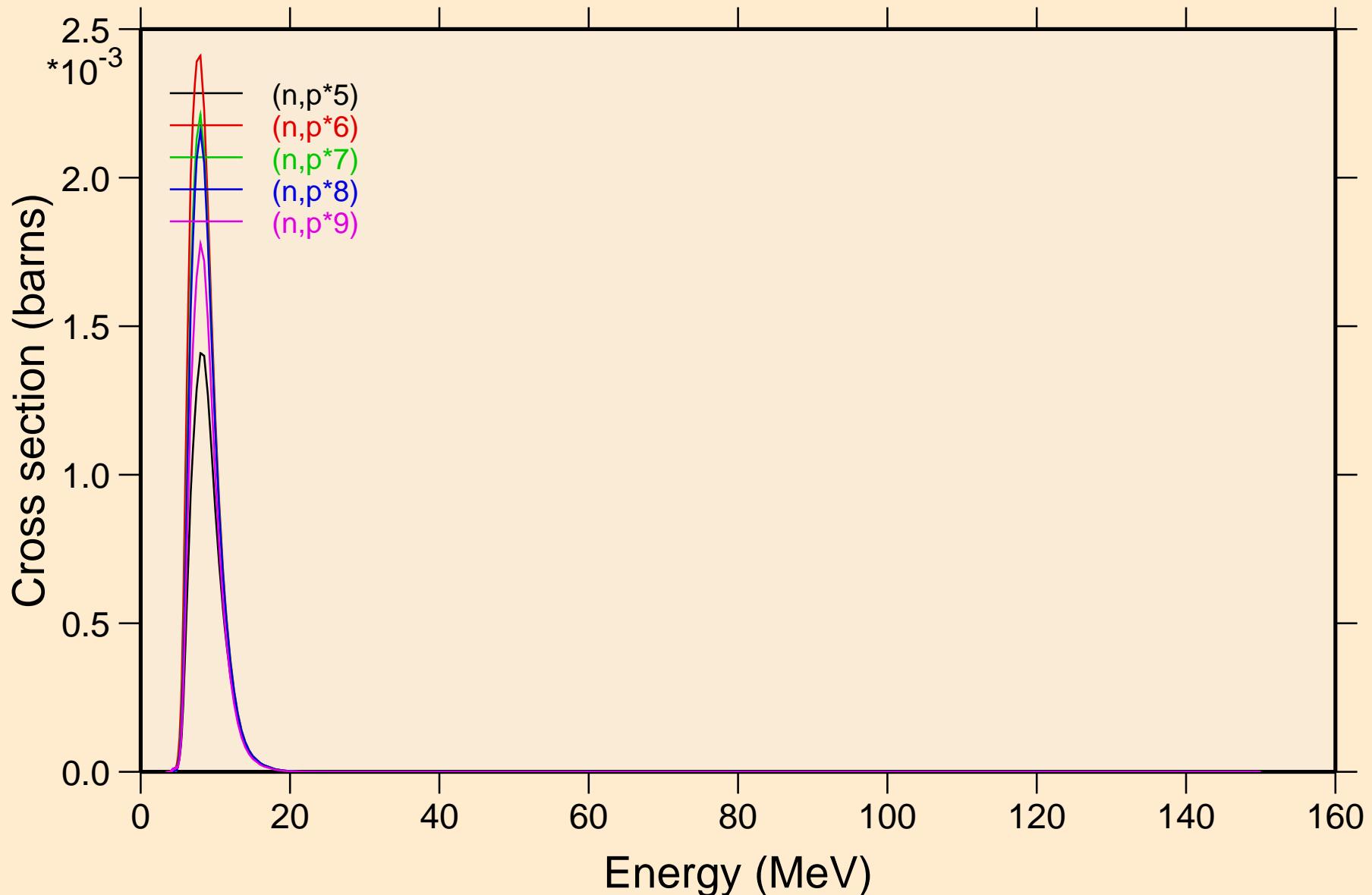
# ADVANCE CALCULATIONS

## Threshold reactions



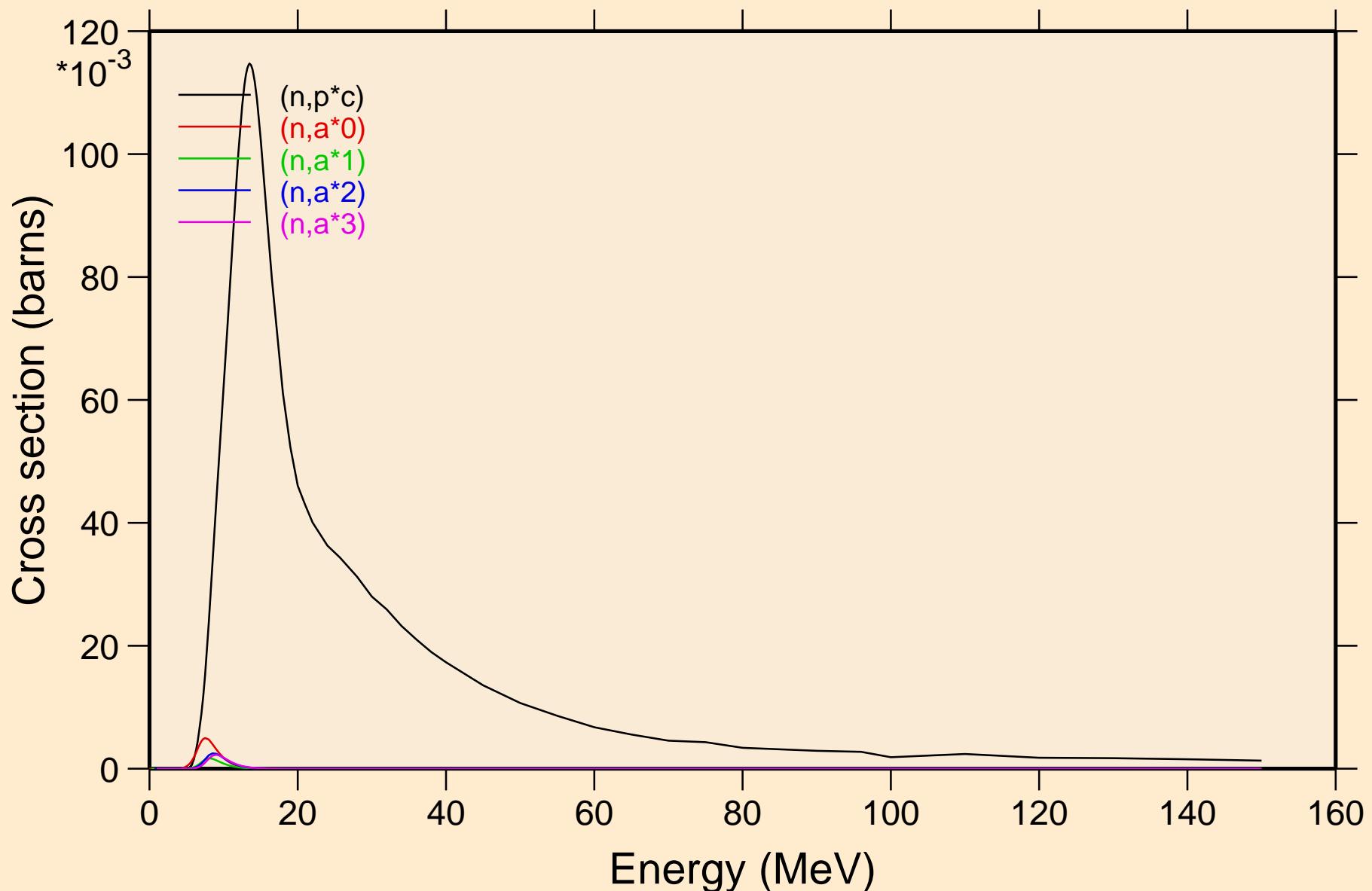
# ADVANCE CALCULATIONS

## Threshold reactions



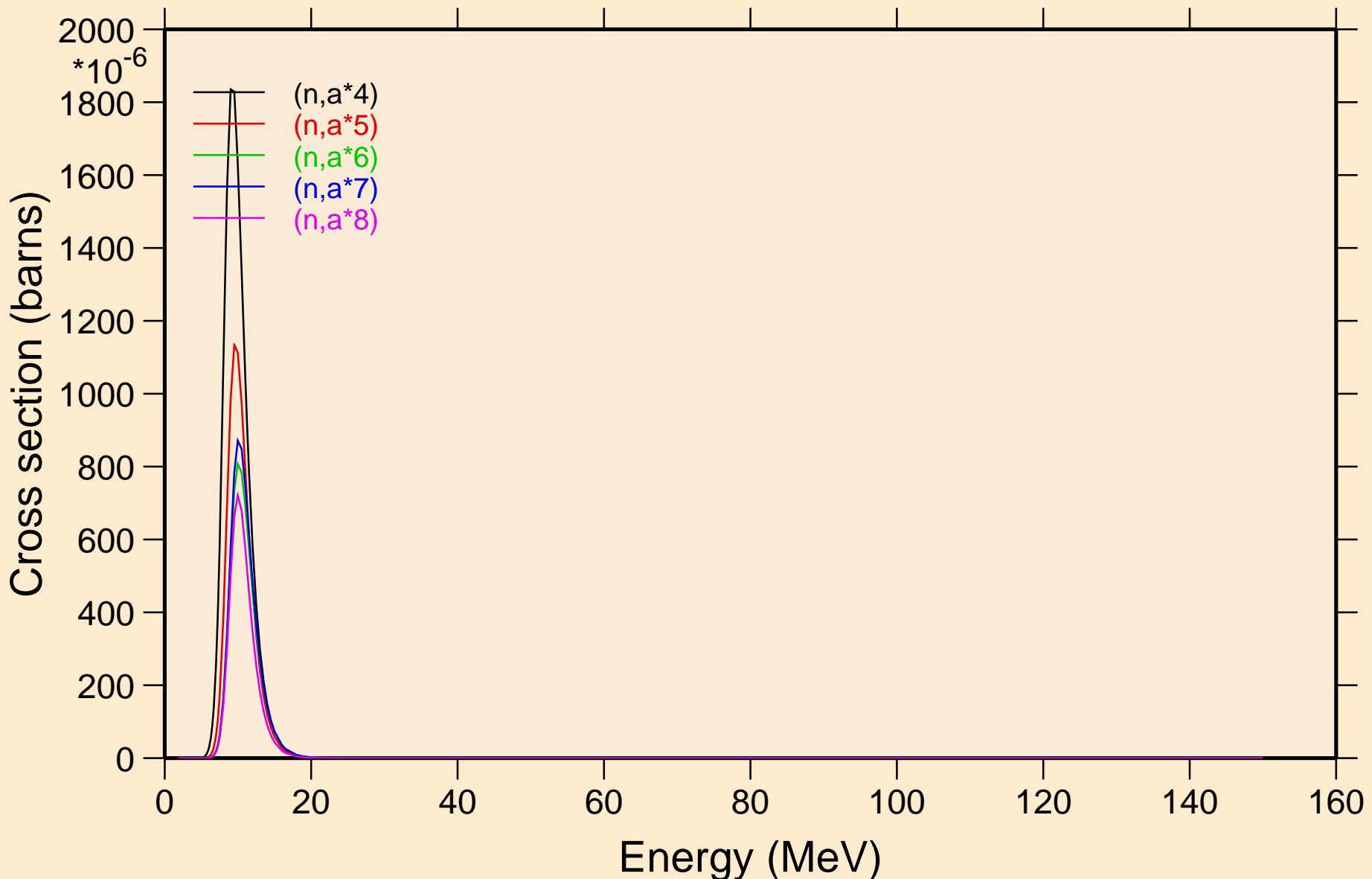
# ADVANCE CALCULATIONS

## Threshold reactions



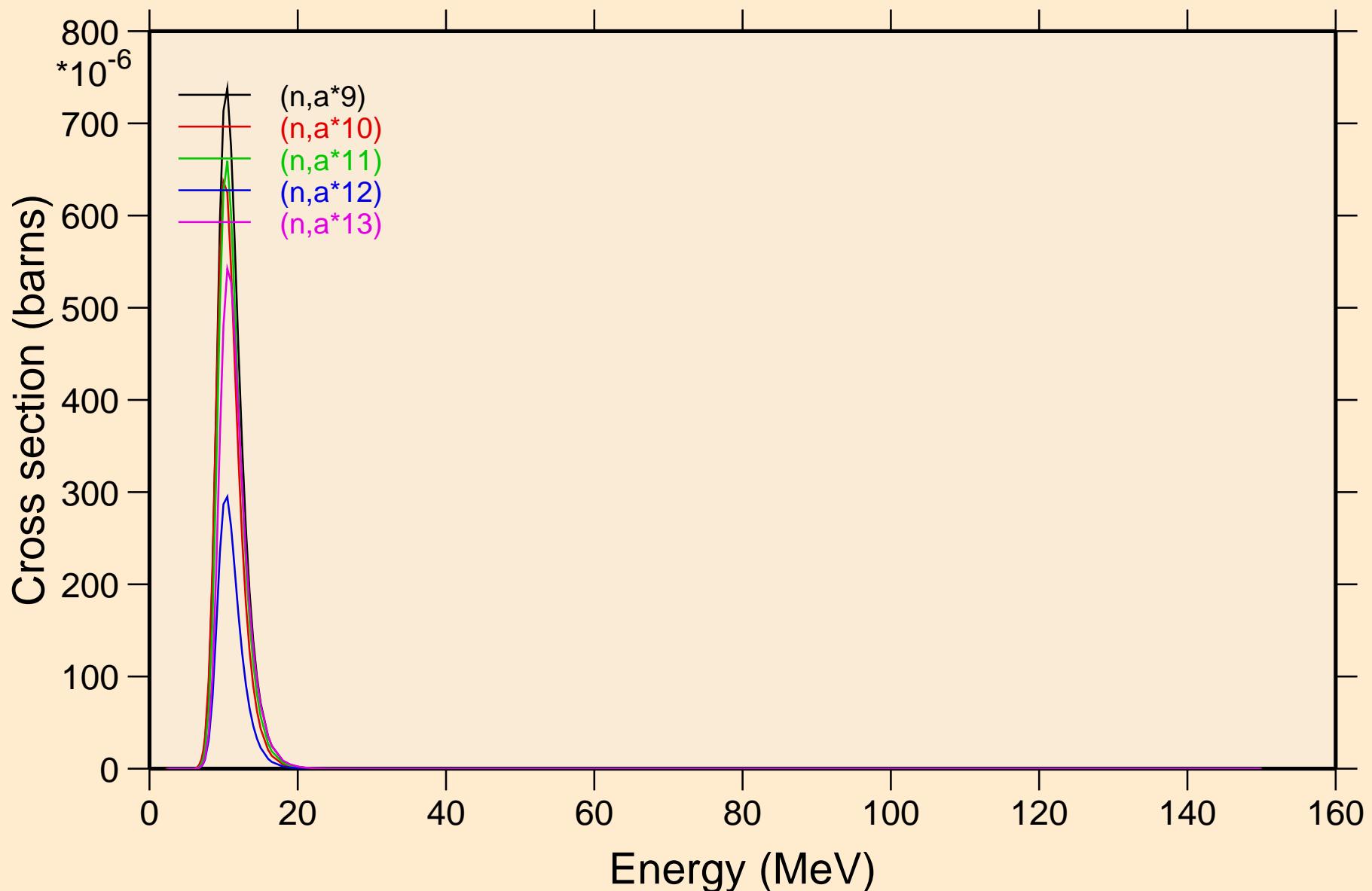
# ADVANCE CALCULATIONS

## Threshold reactions



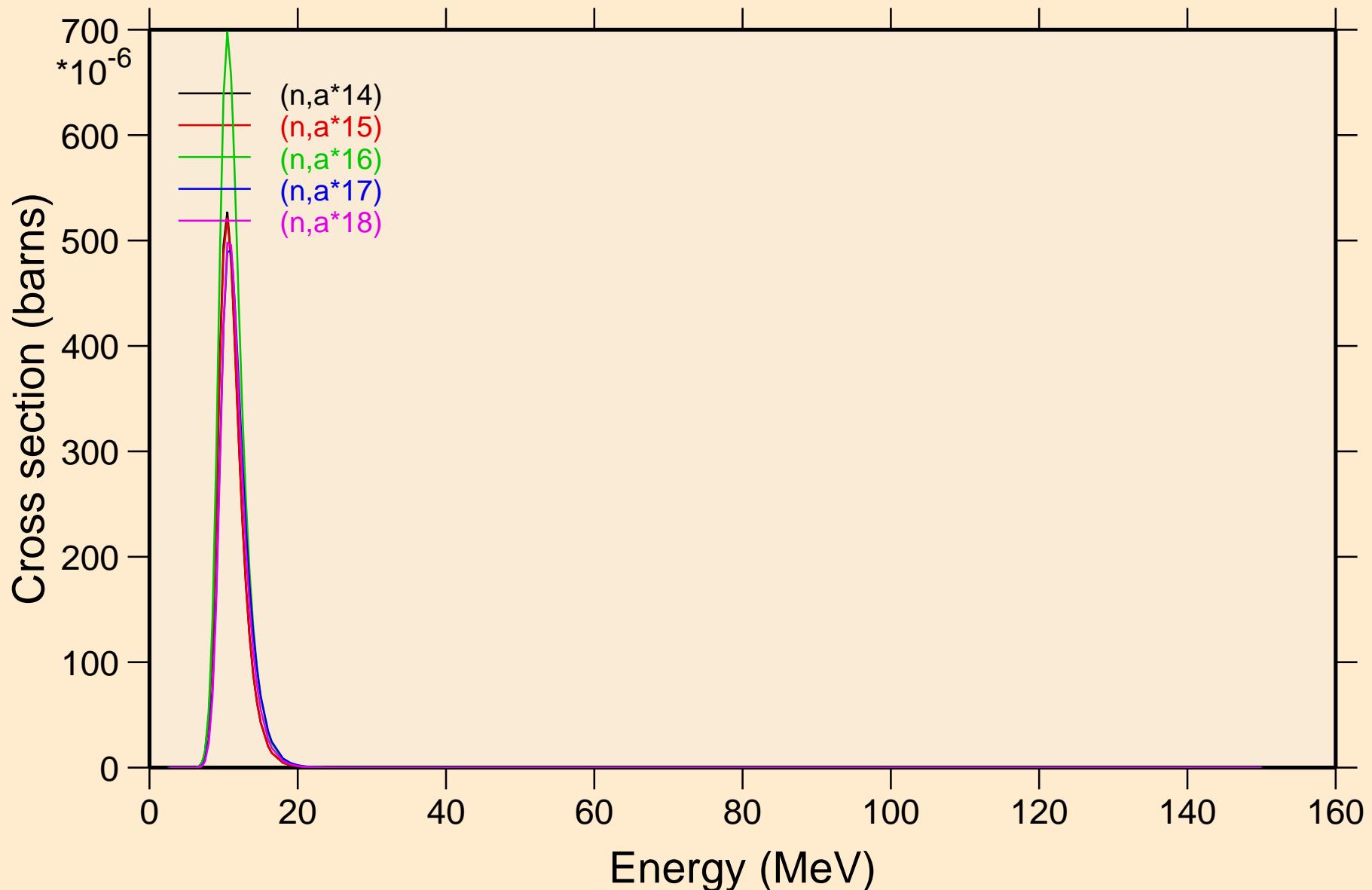
# ADVANCE CALCULATIONS

## Threshold reactions



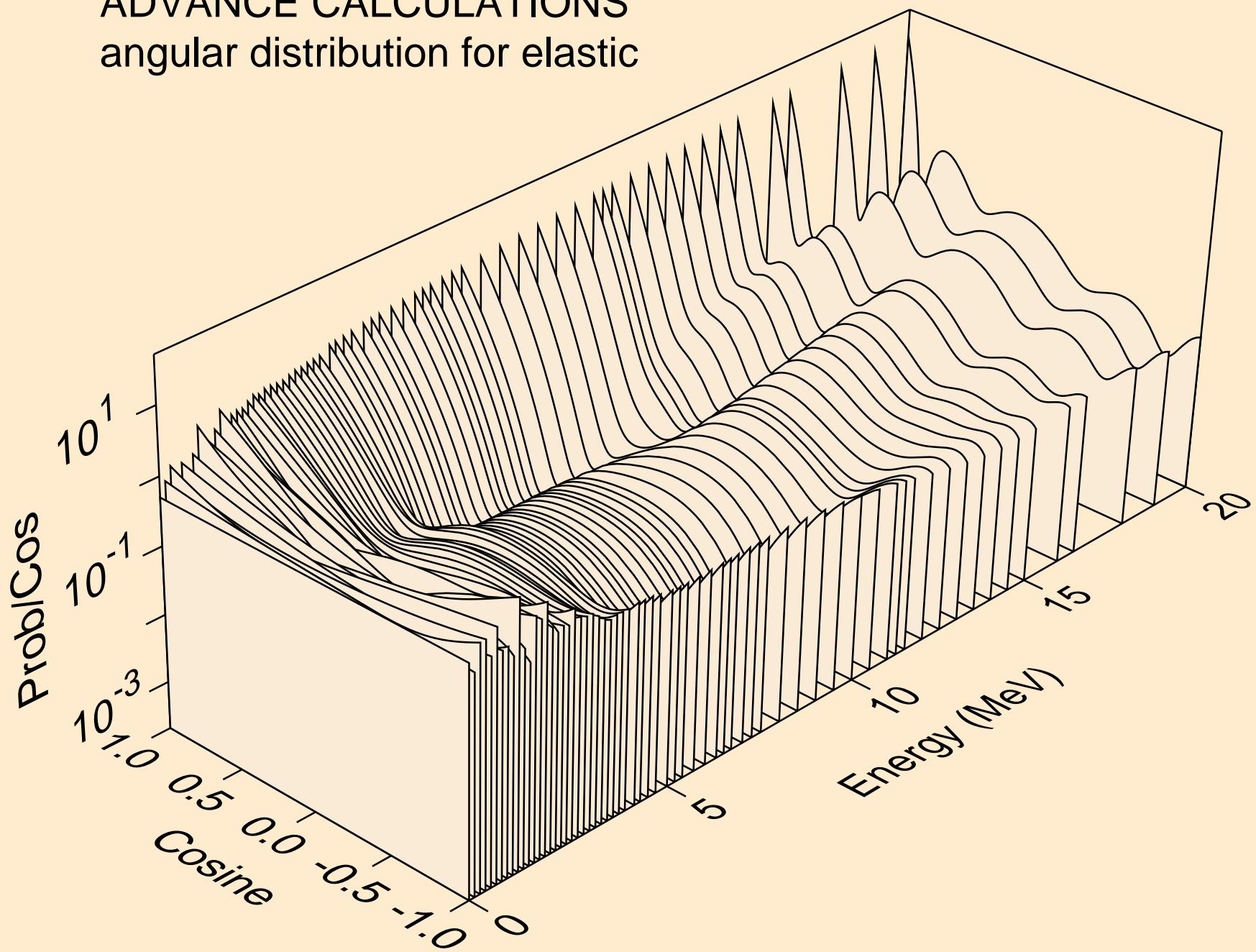
# ADVANCE CALCULATIONS

## Threshold reactions



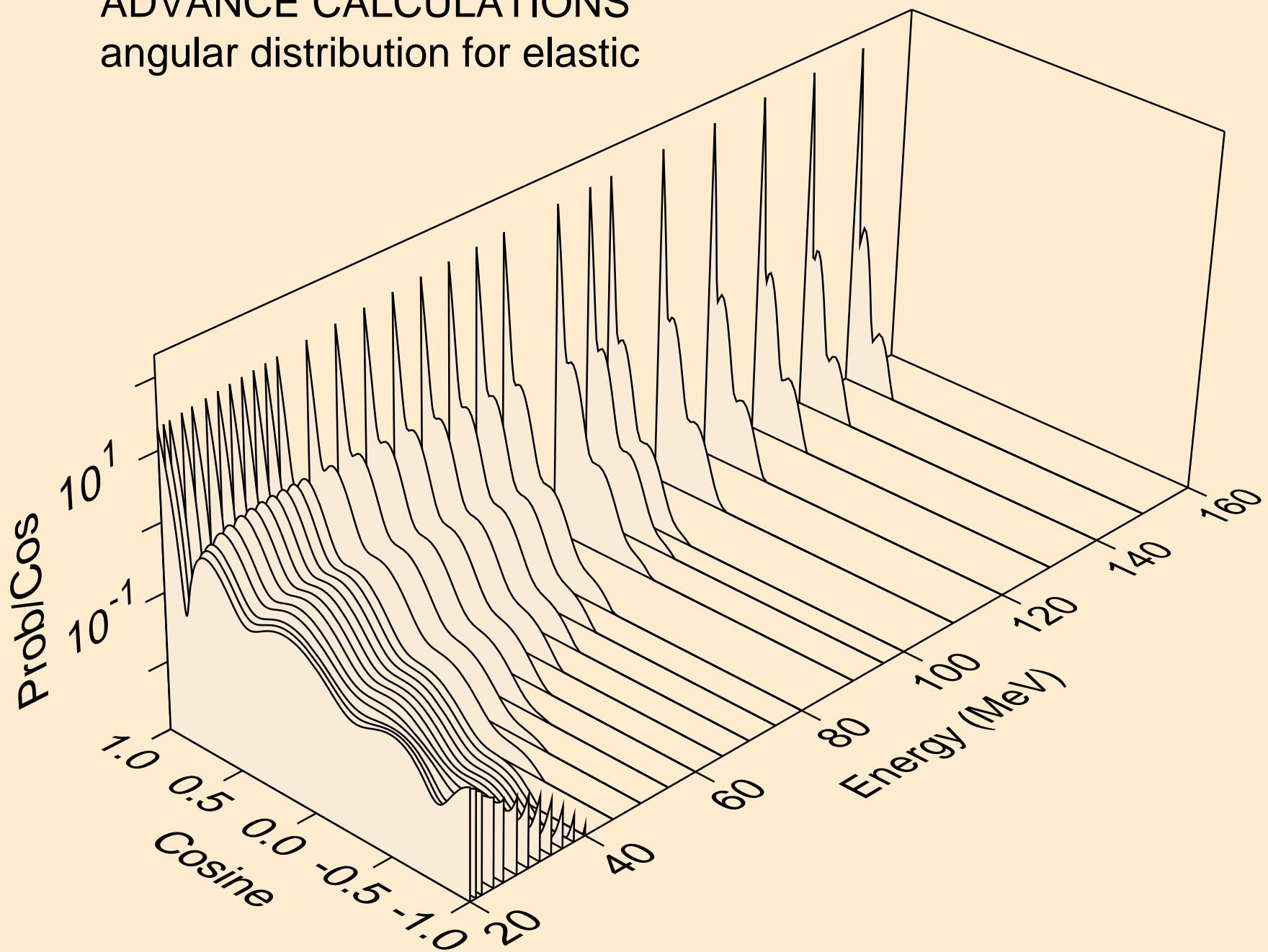
# ADVANCE CALCULATIONS

angular distribution for elastic



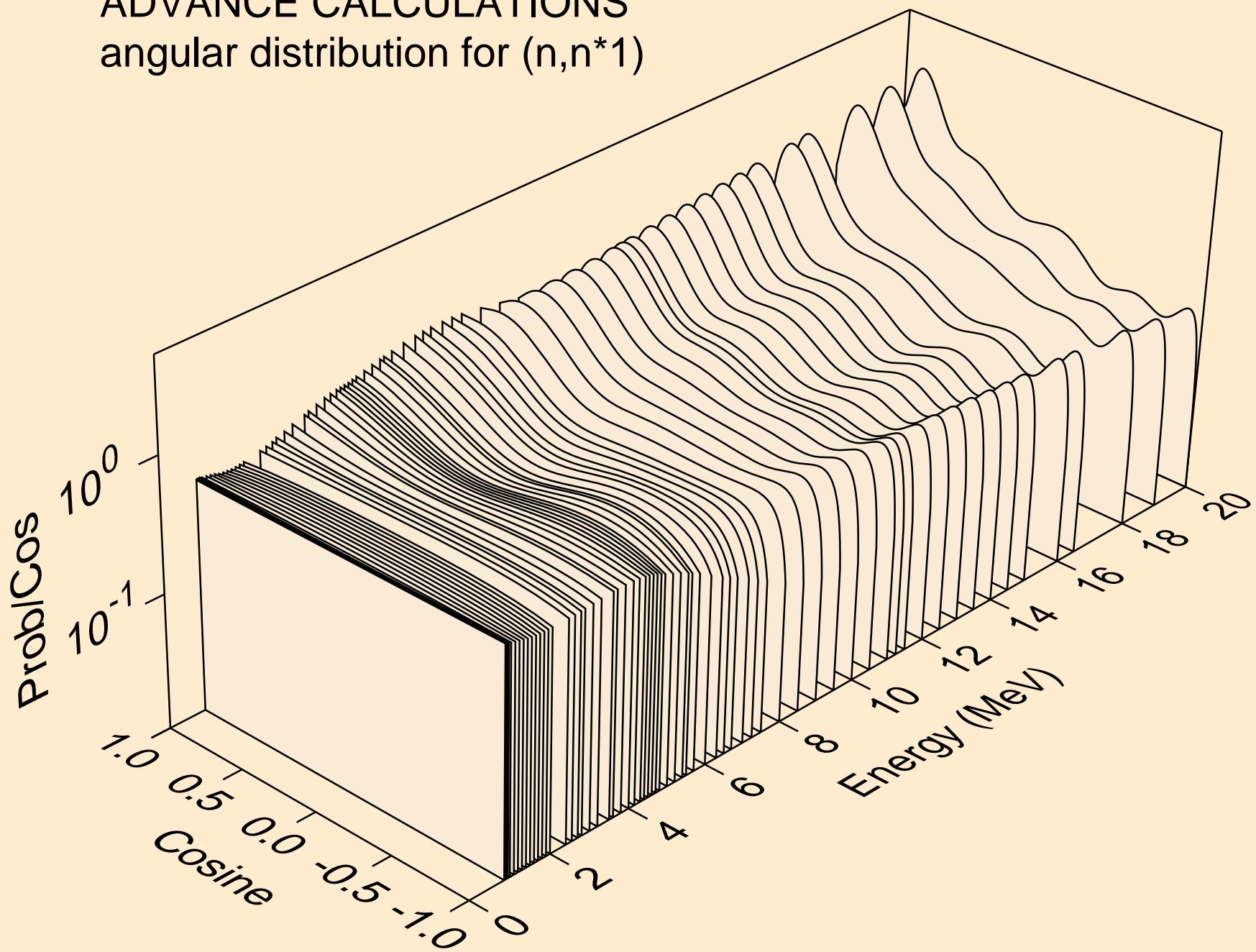
# ADVANCE CALCULATIONS

## angular distribution for elastic



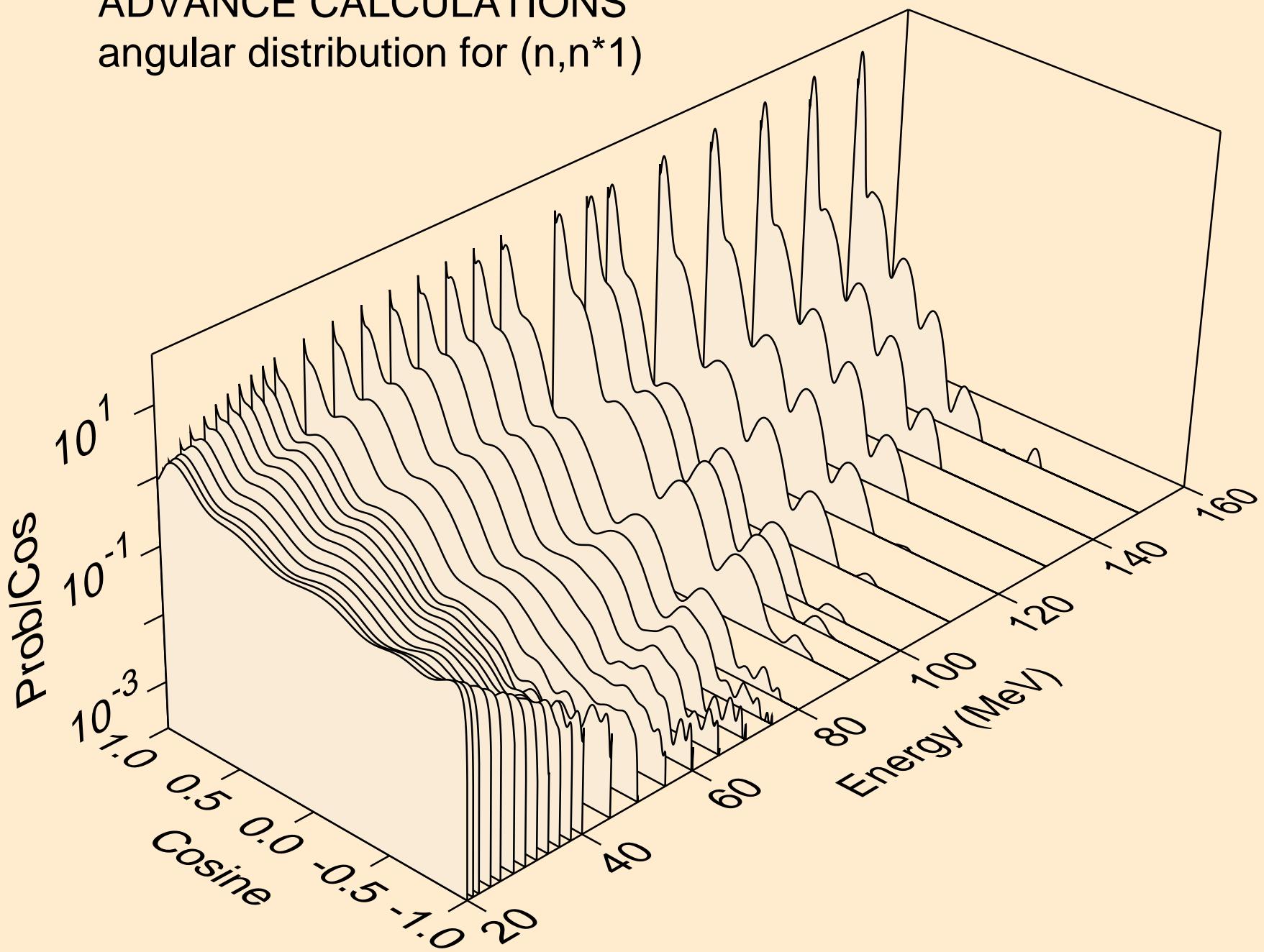
# ADVANCE CALCULATIONS

## angular distribution for $(n,n^*)$



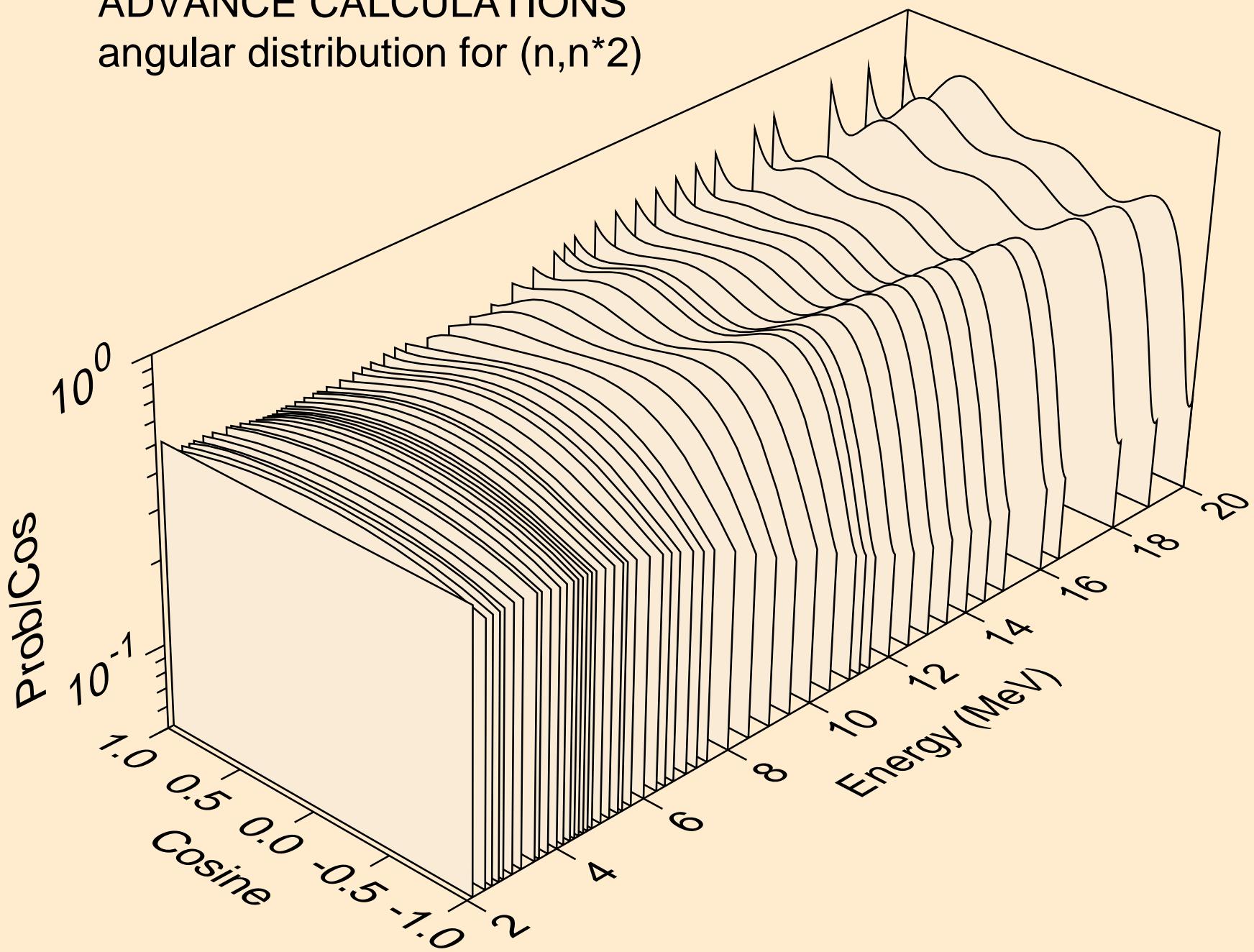
# ADVANCE CALCULATIONS

## angular distribution for (n,n\*1)



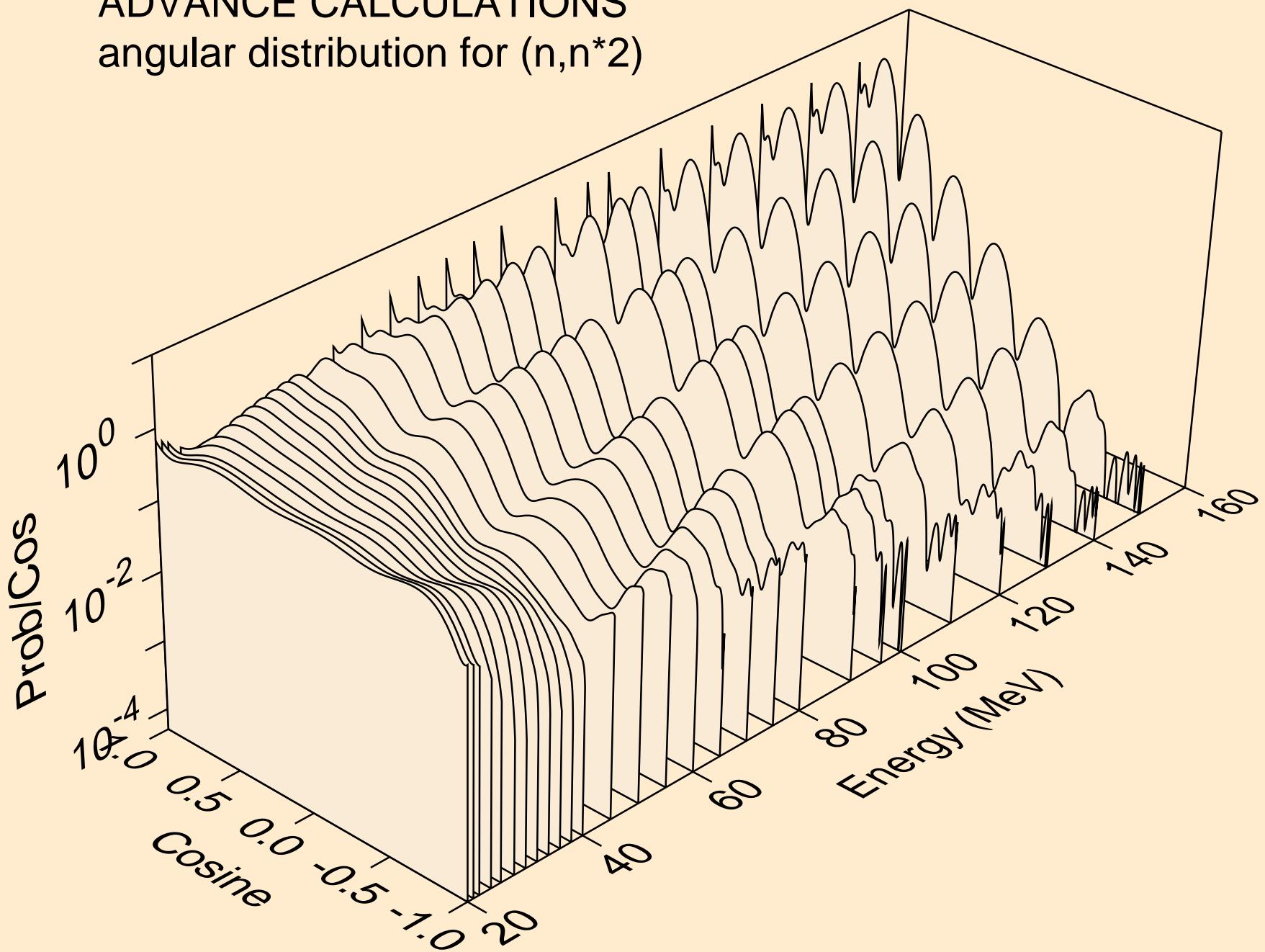
# ADVANCE CALCULATIONS

## angular distribution for $(n,n^*)^2$



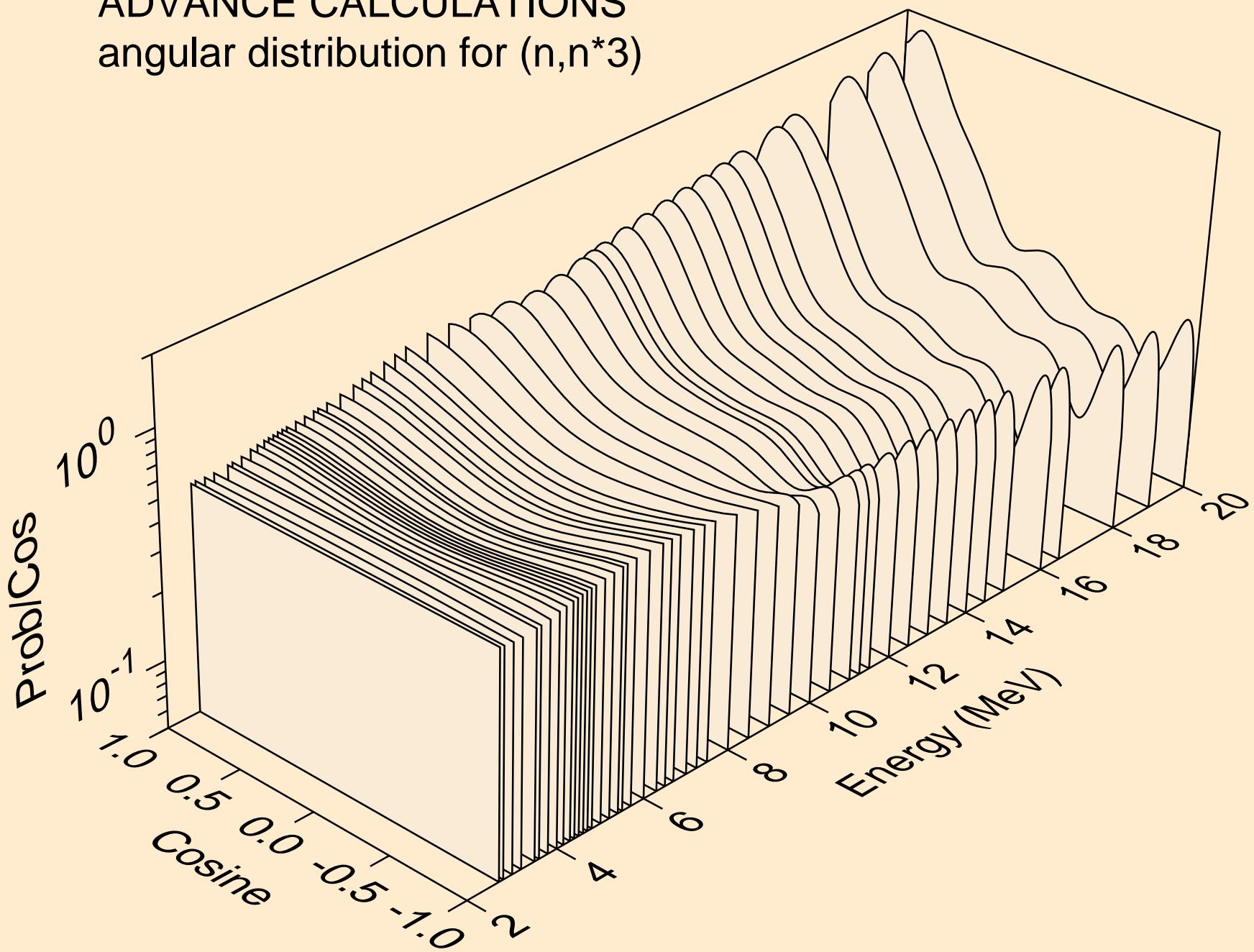
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^2$



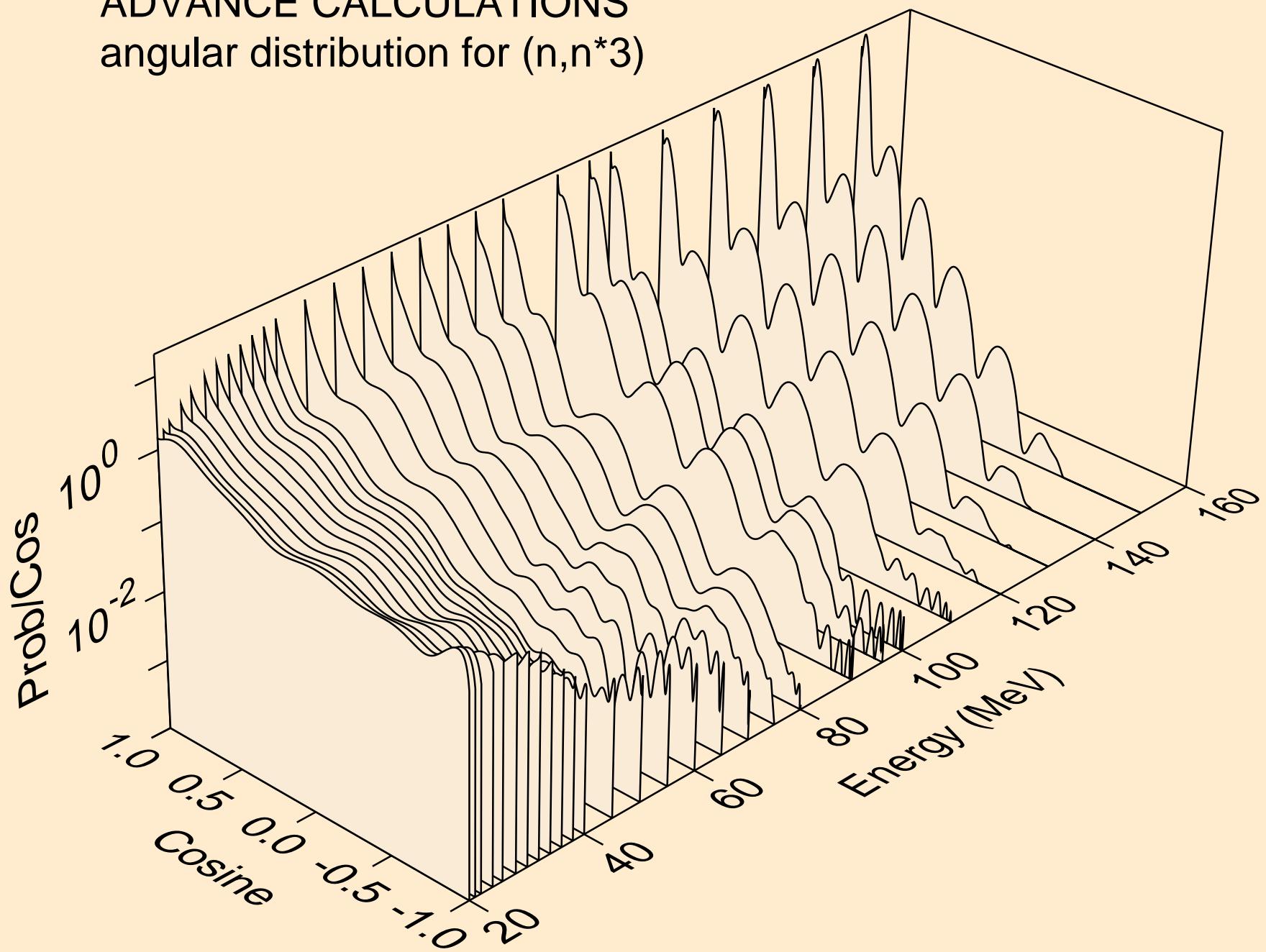
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^3$



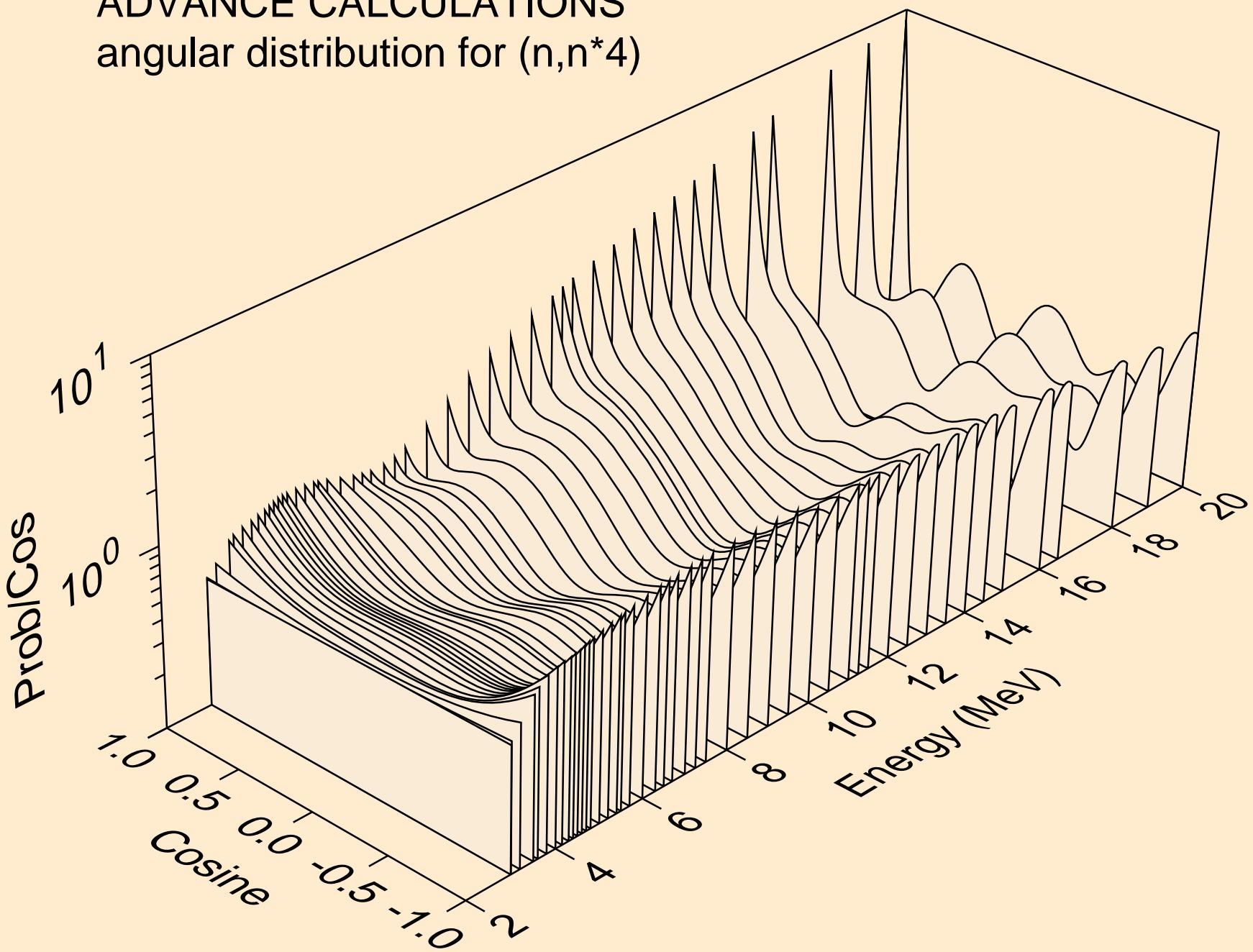
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*3)$



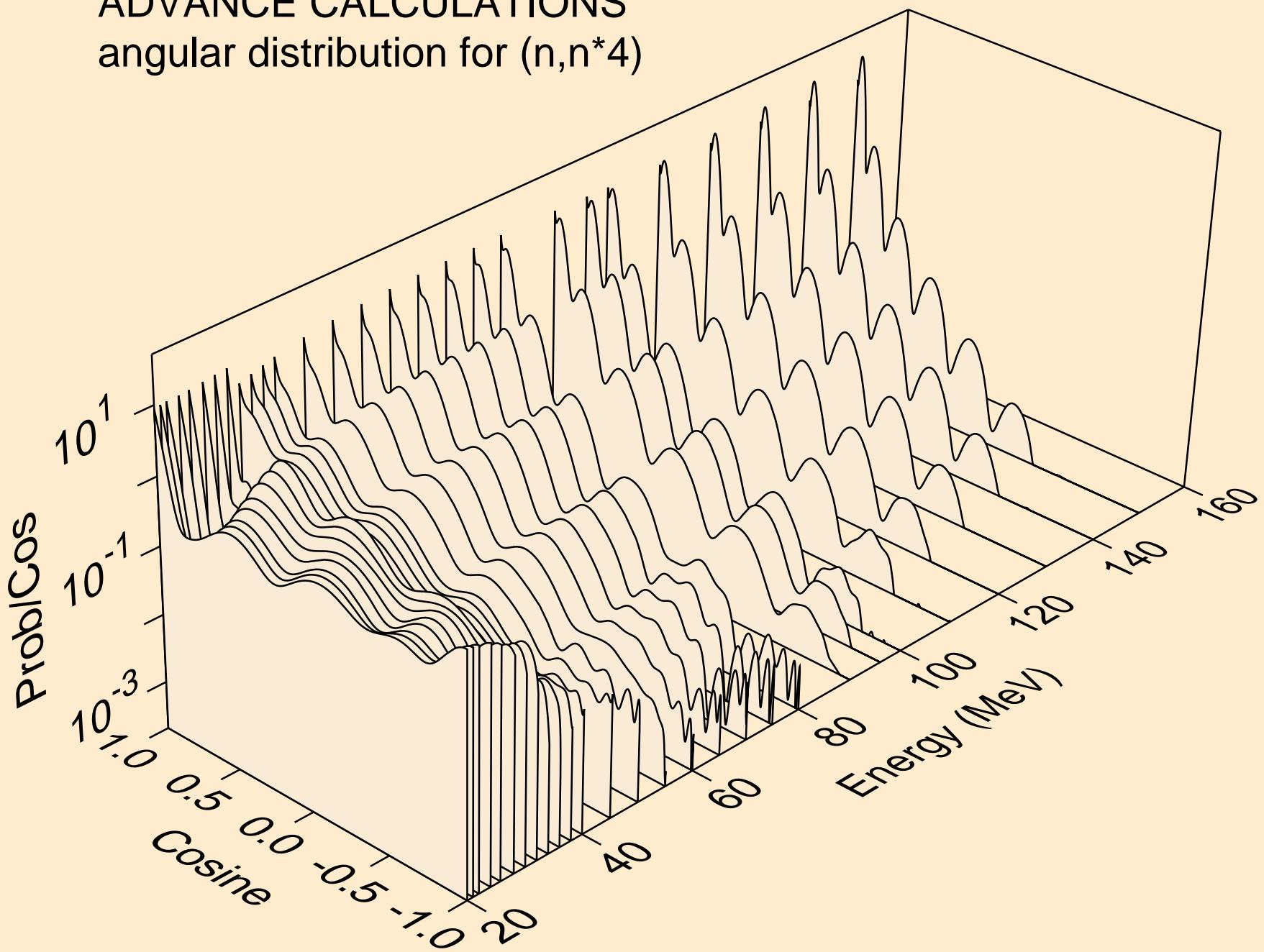
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*4)$



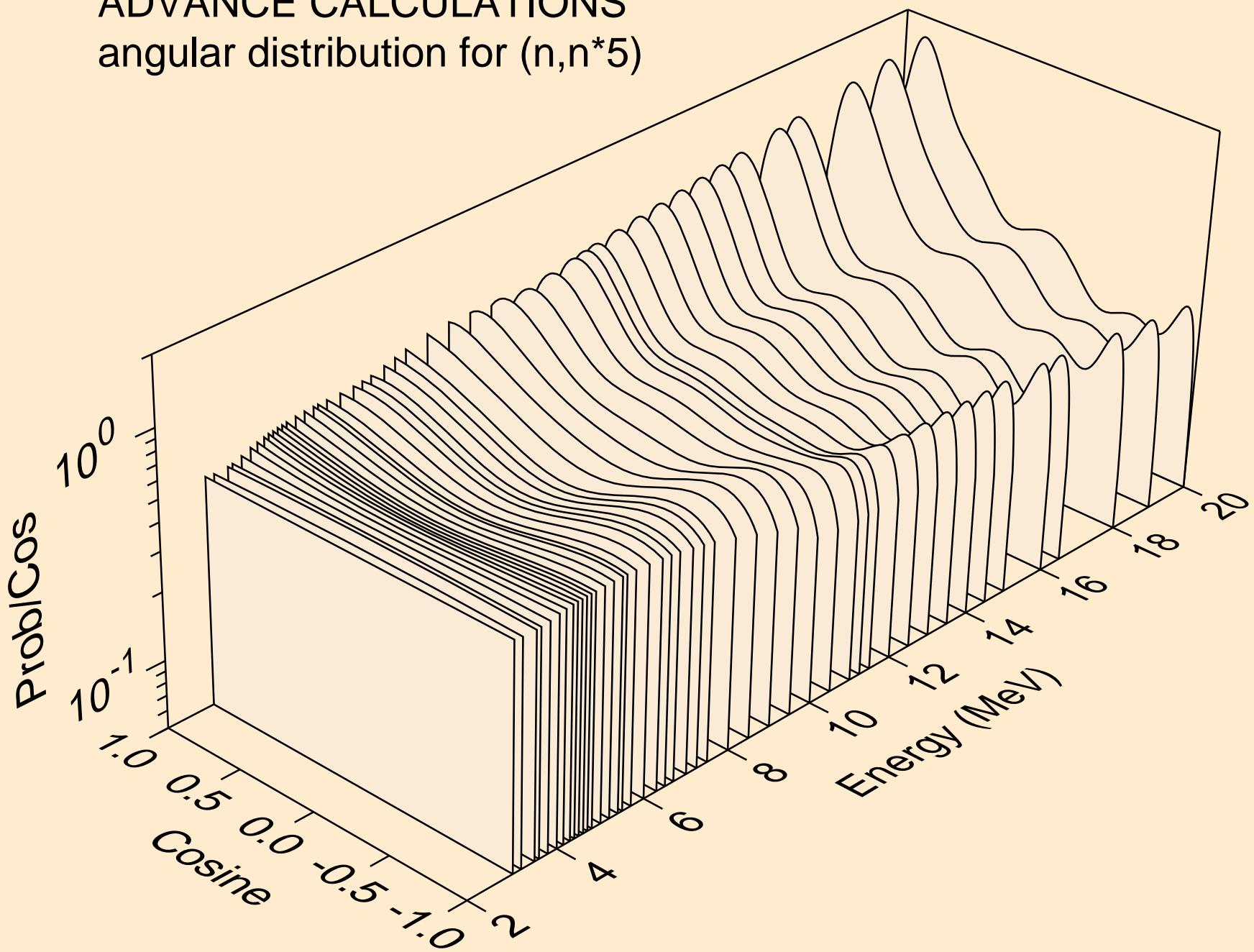
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)4$



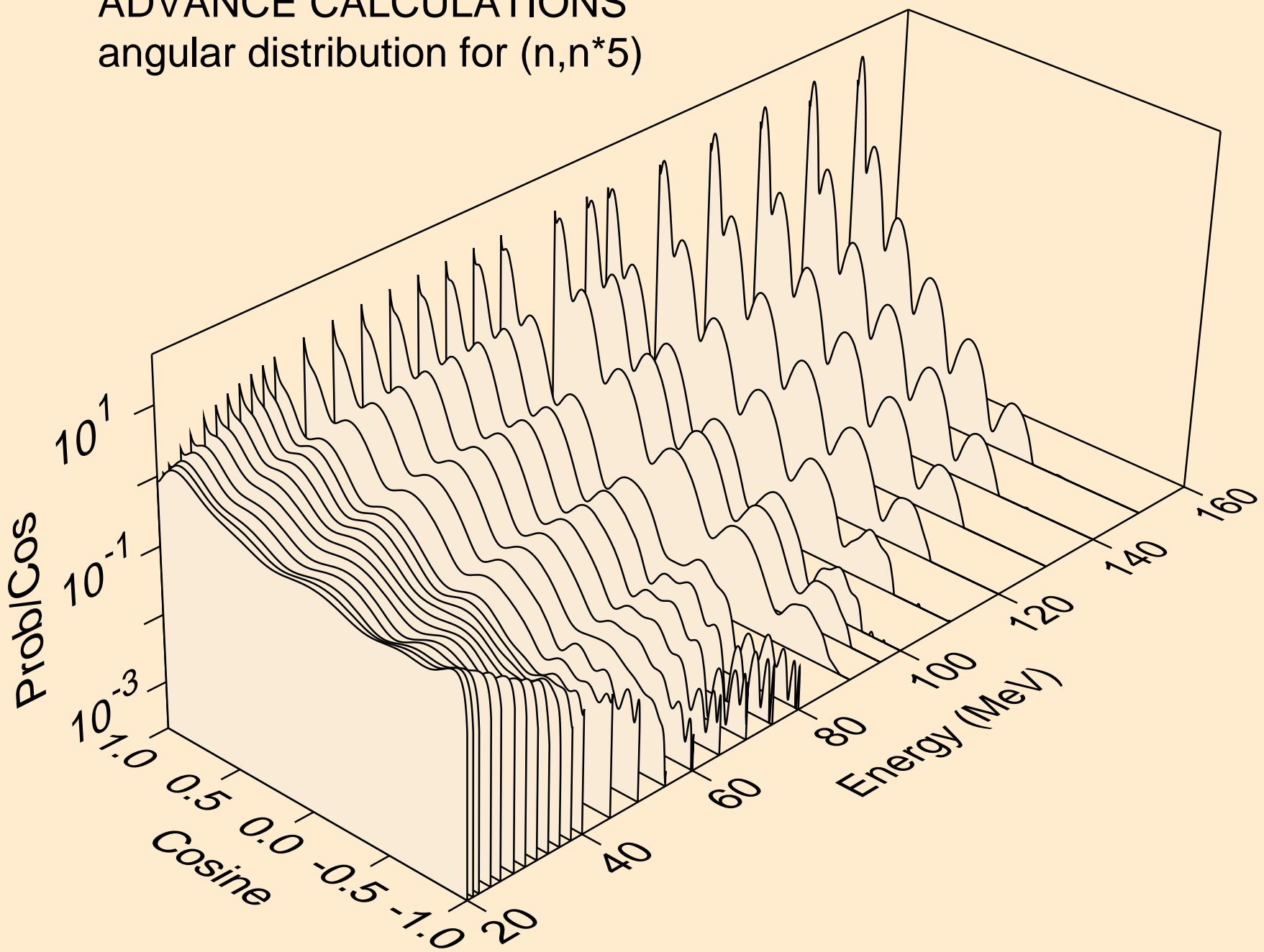
# ADVANCE CALCULATIONS

## angular distribution for $(n,n^*)^5$



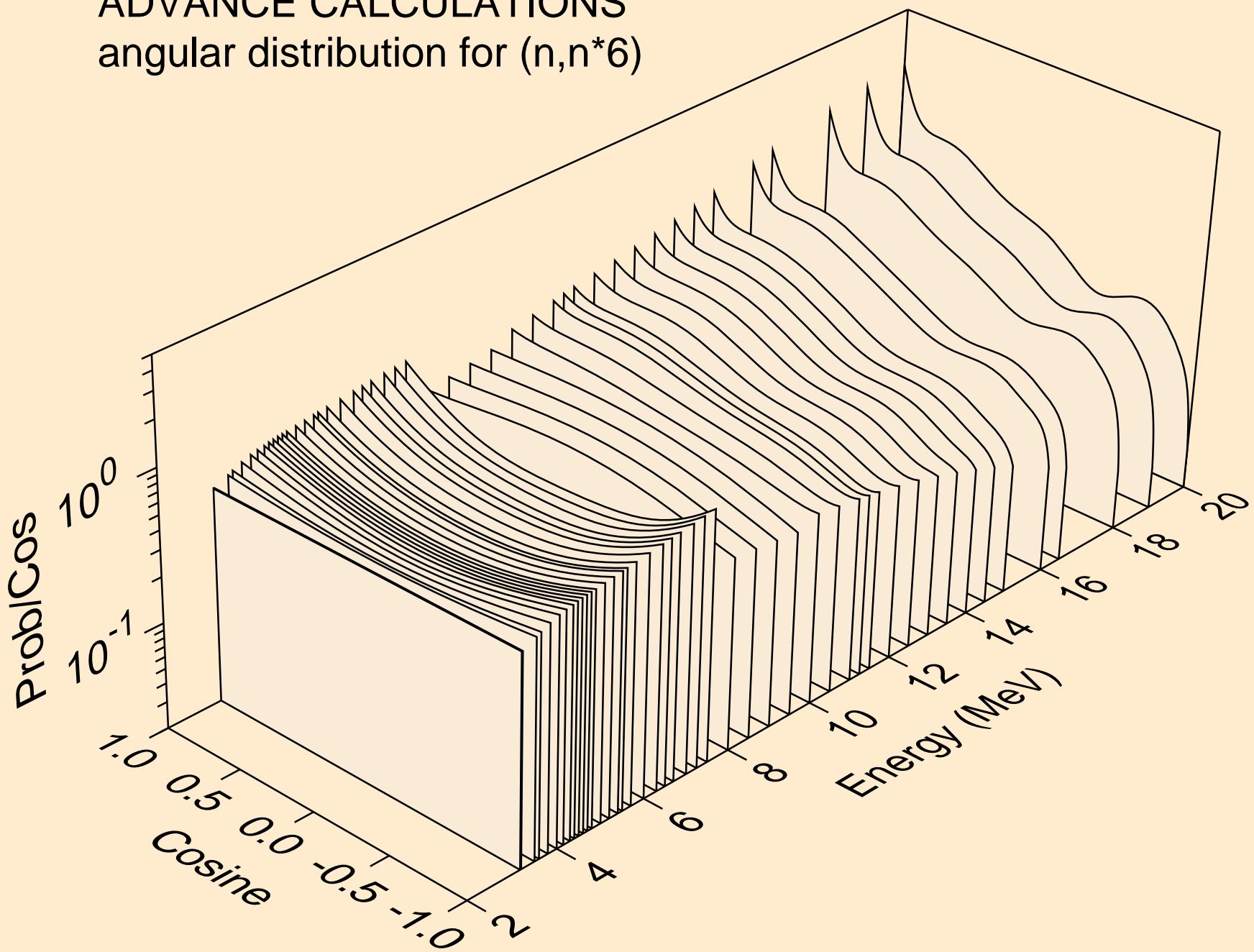
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^5$



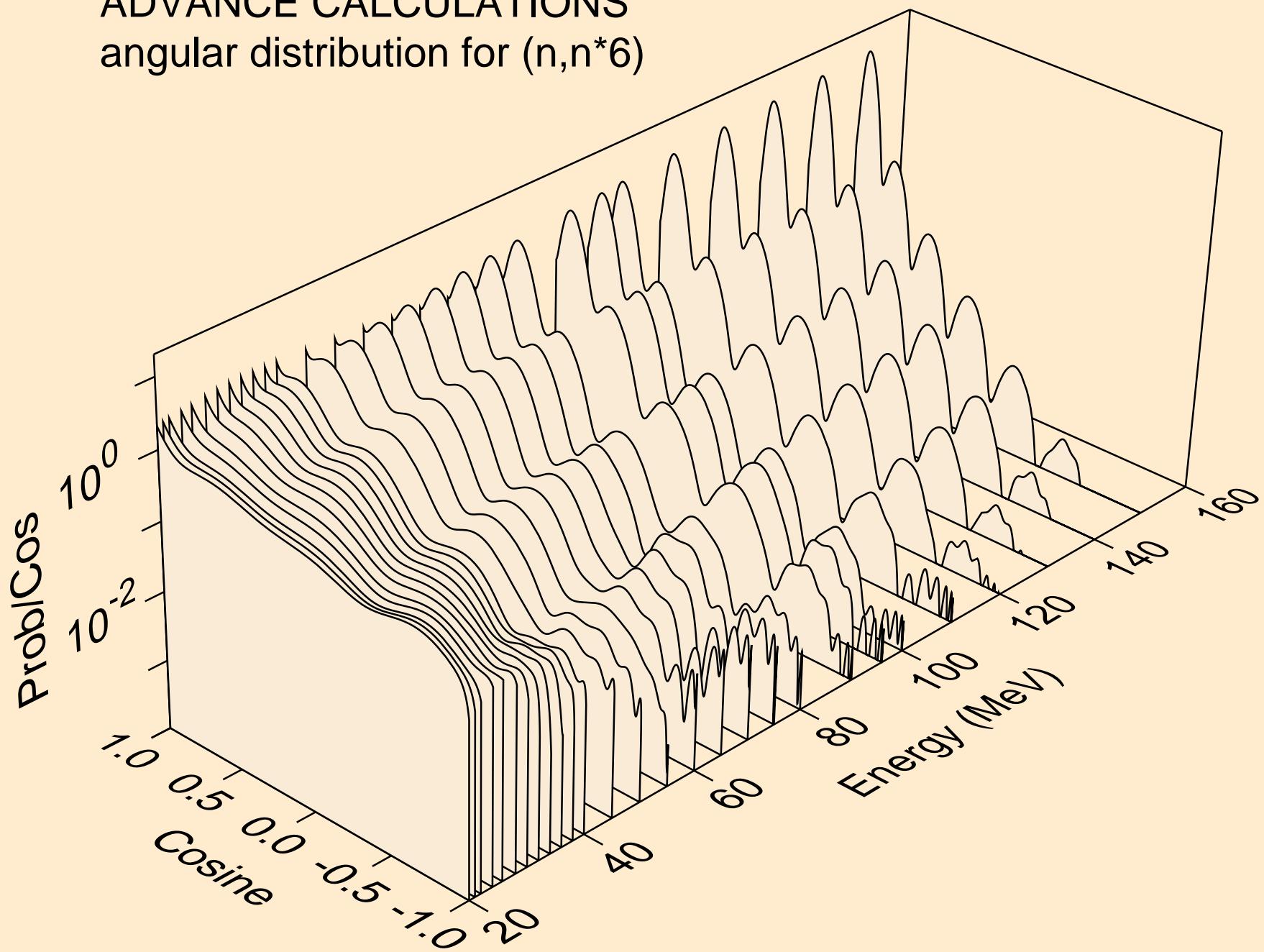
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*6)$



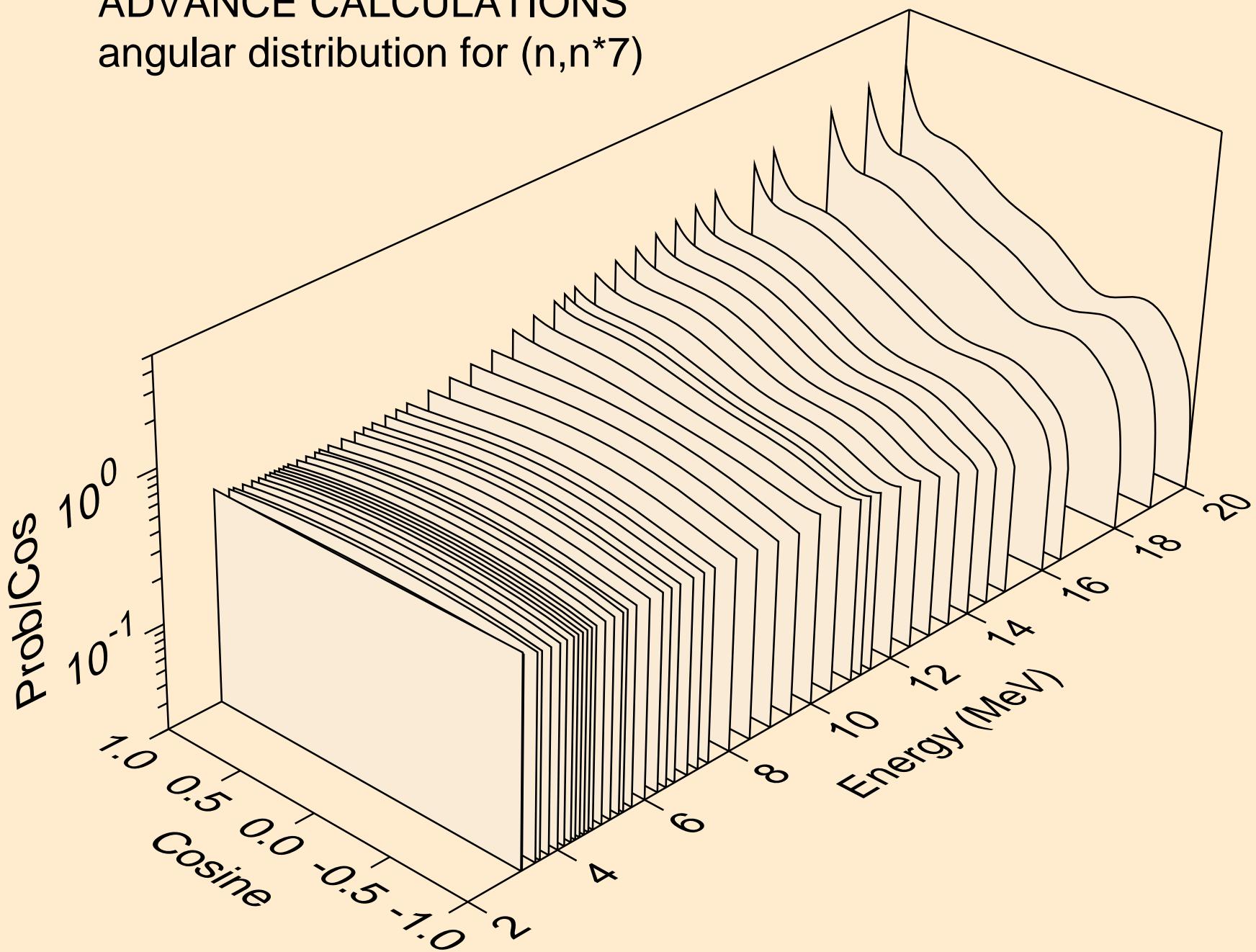
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*6)$



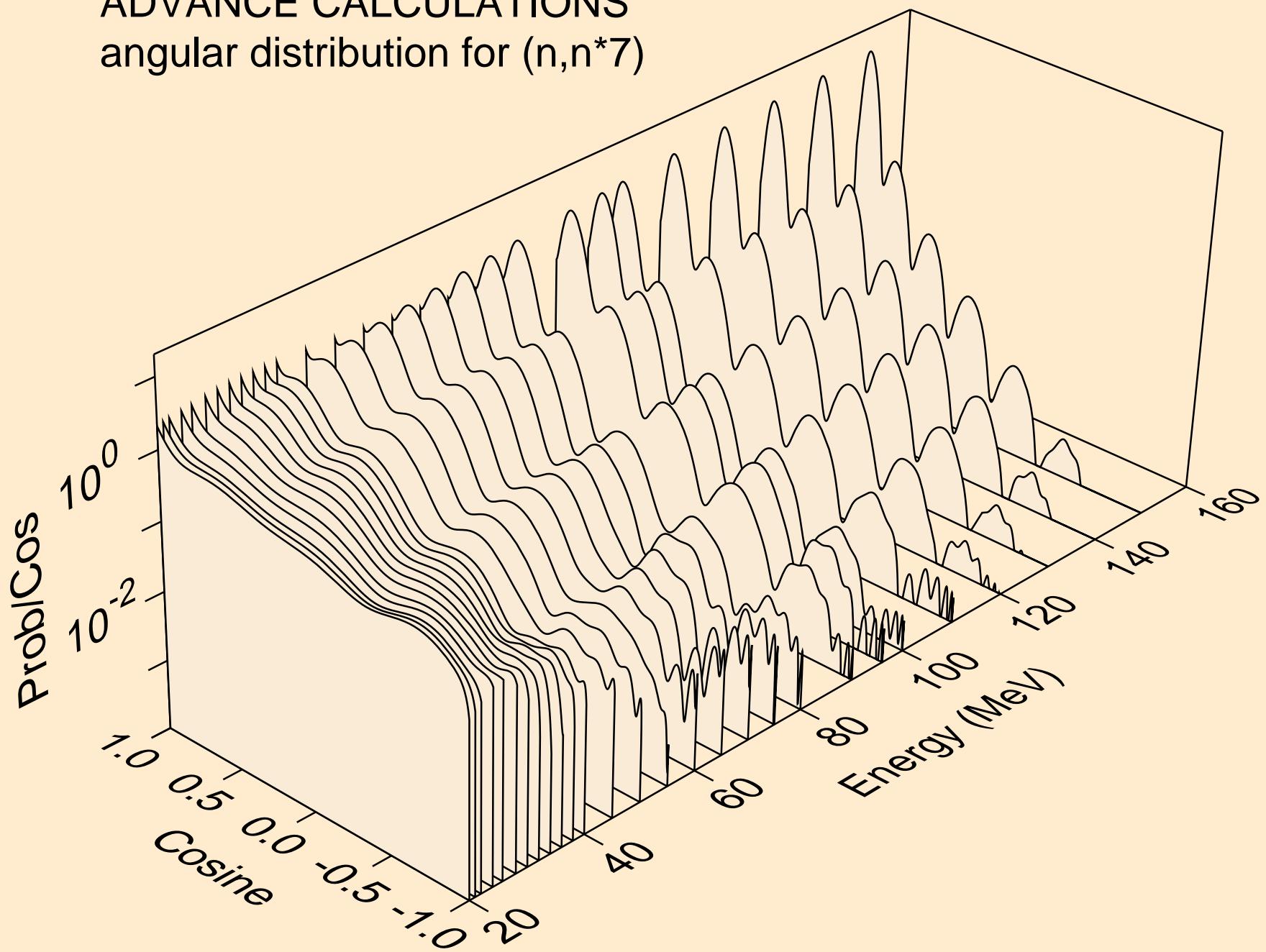
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)7$



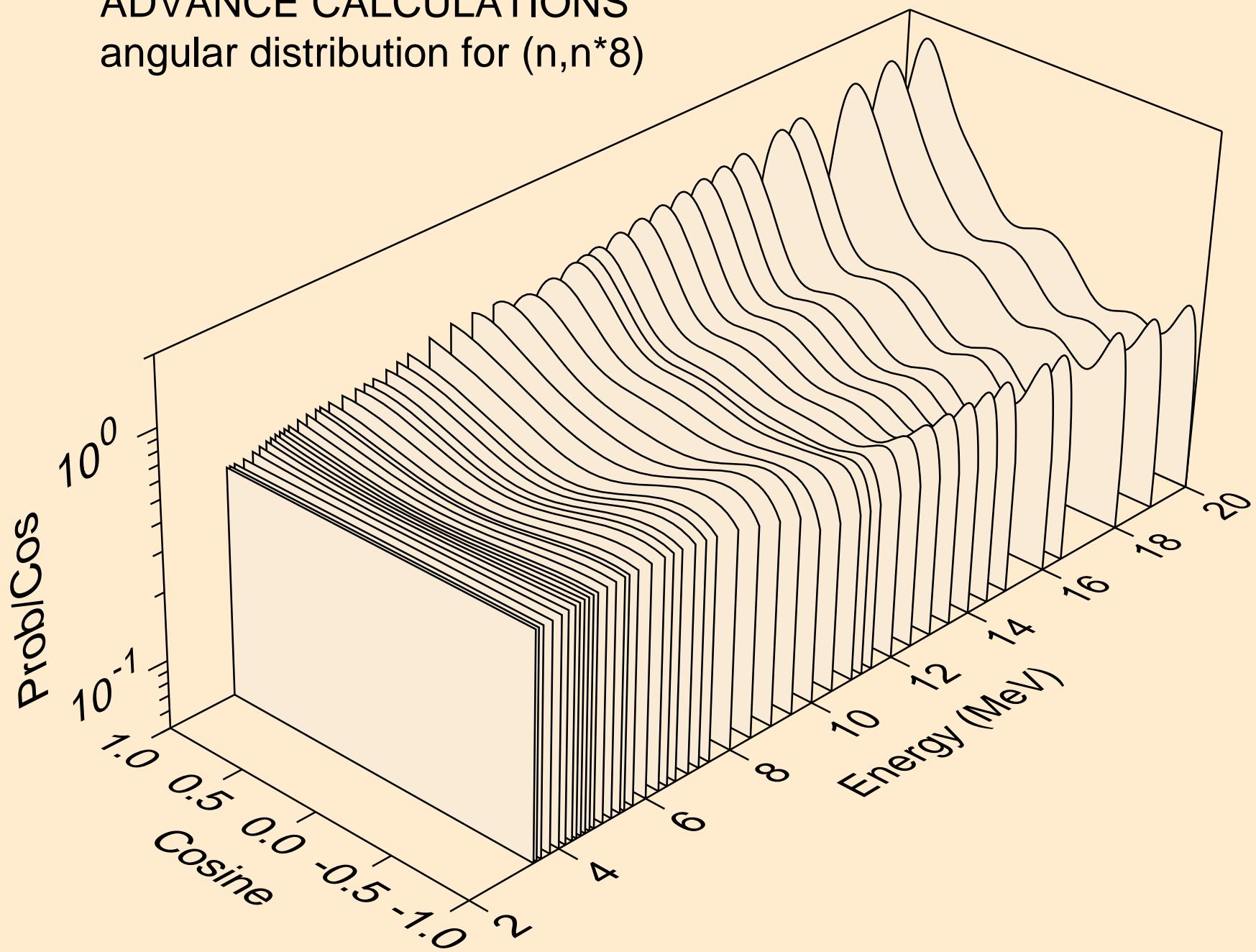
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^7$



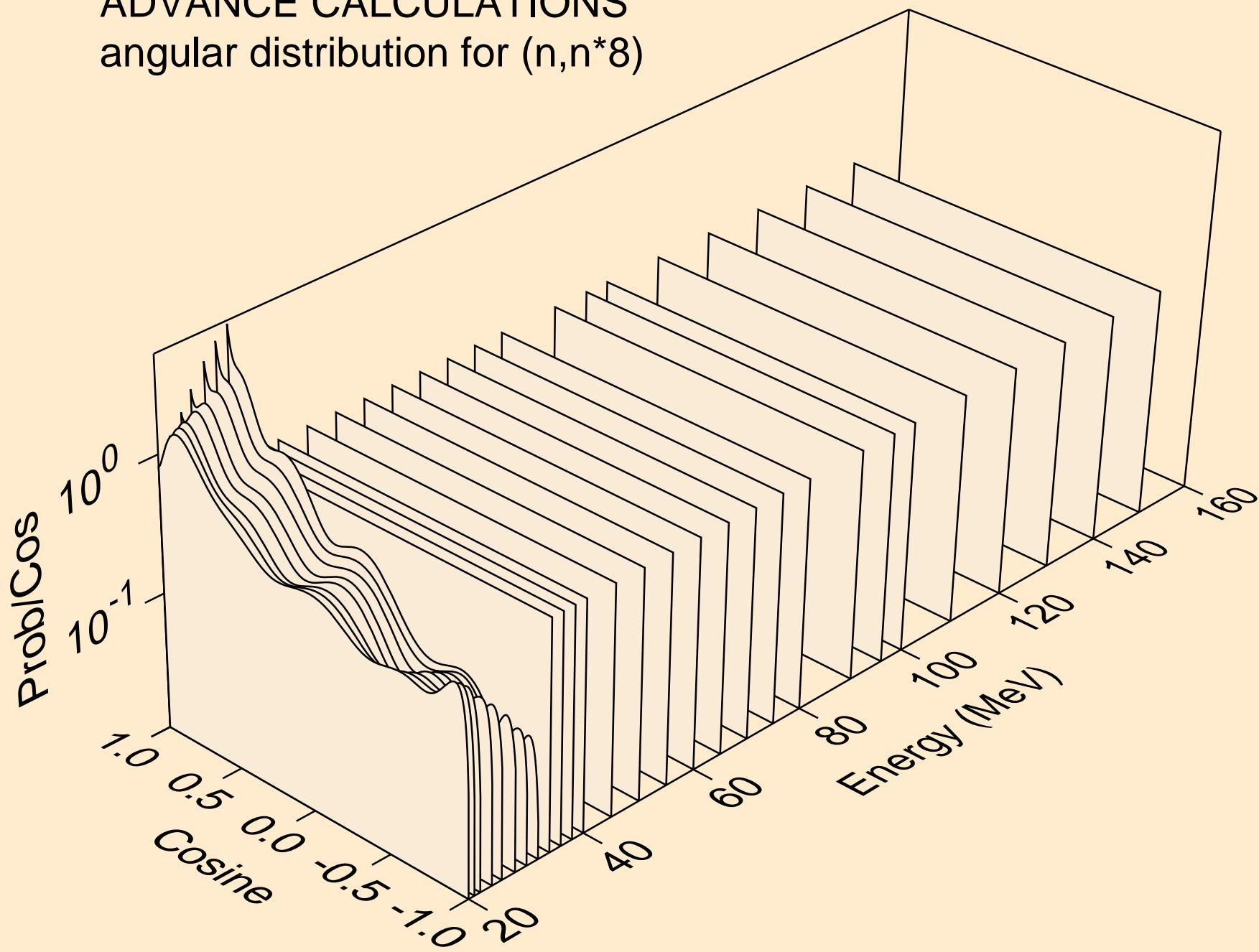
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*8)$



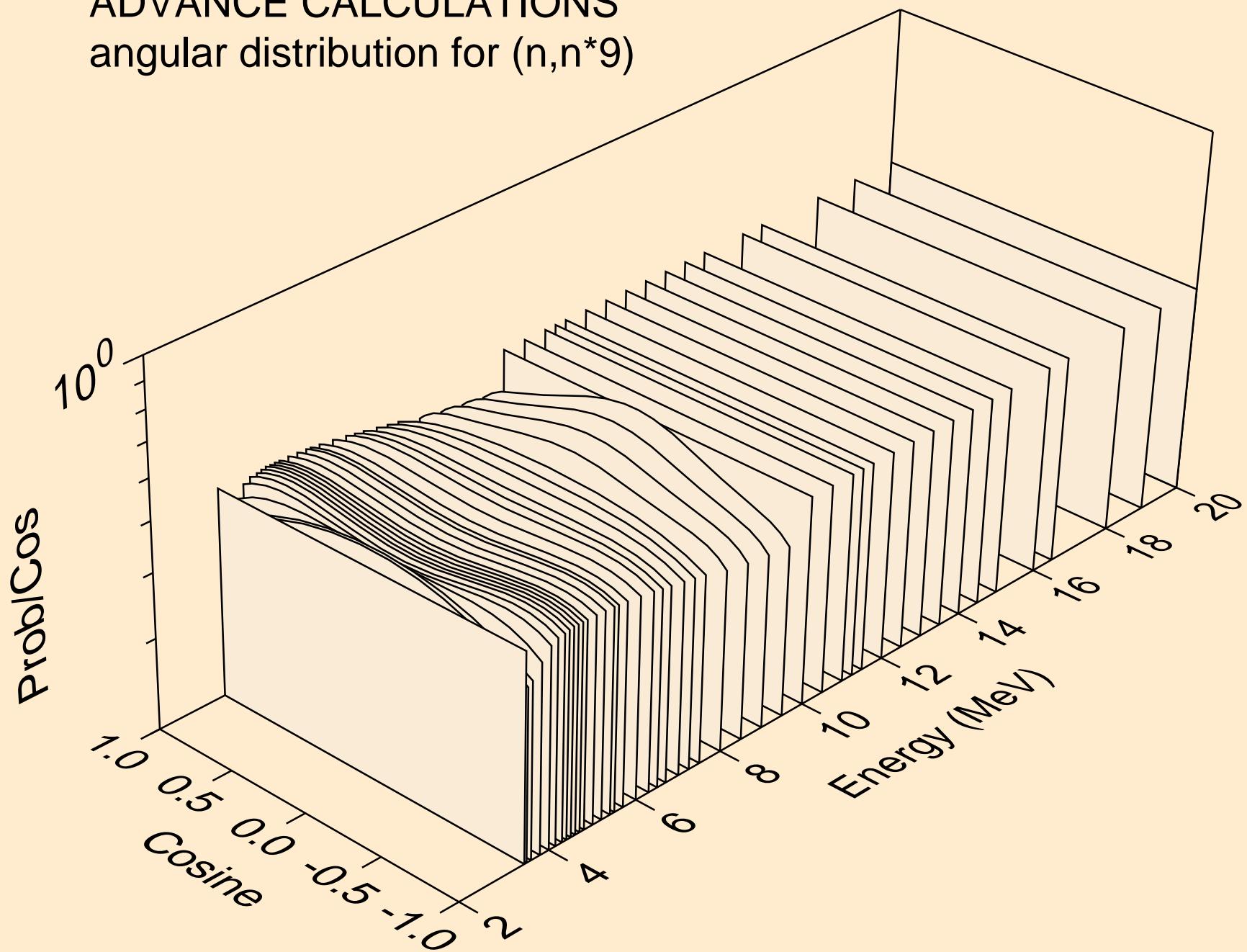
# ADVANCE CALCULATIONS

## angular distribution for $(n,n^*)^8$



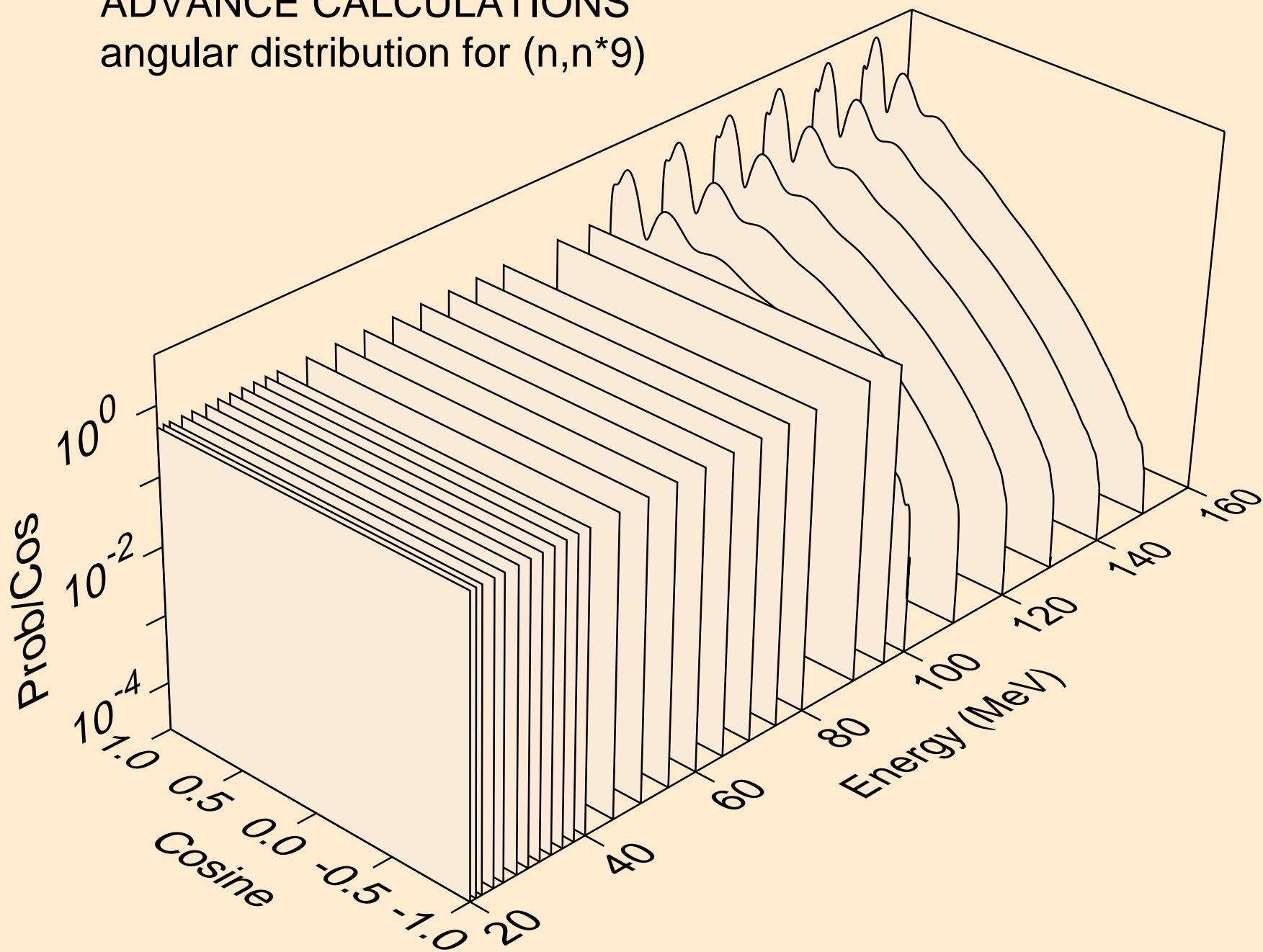
# ADVANCE CALCULATIONS

## angular distribution for (n,n\*9)



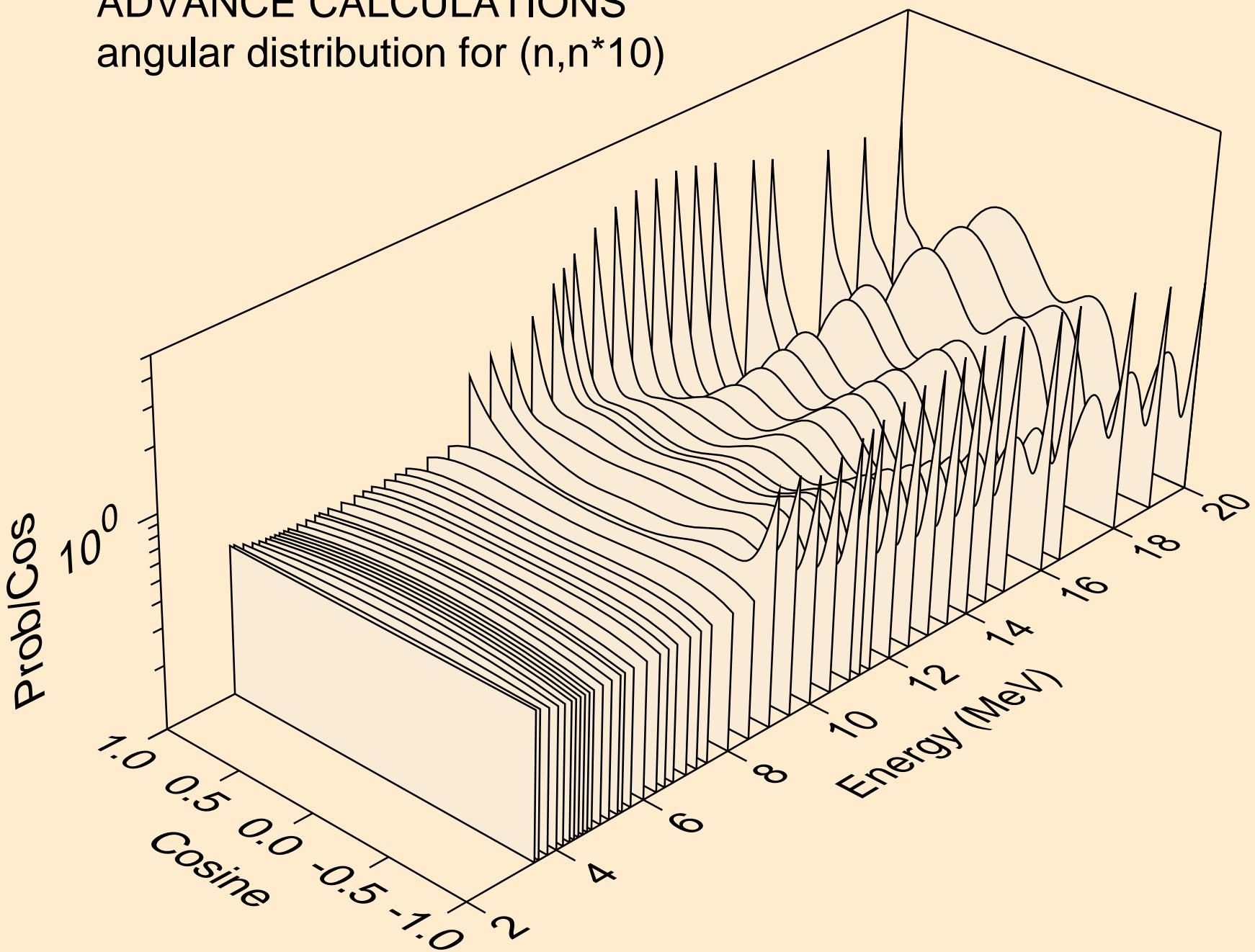
# ADVANCE CALCULATIONS

## angular distribution for (n,n\*9)



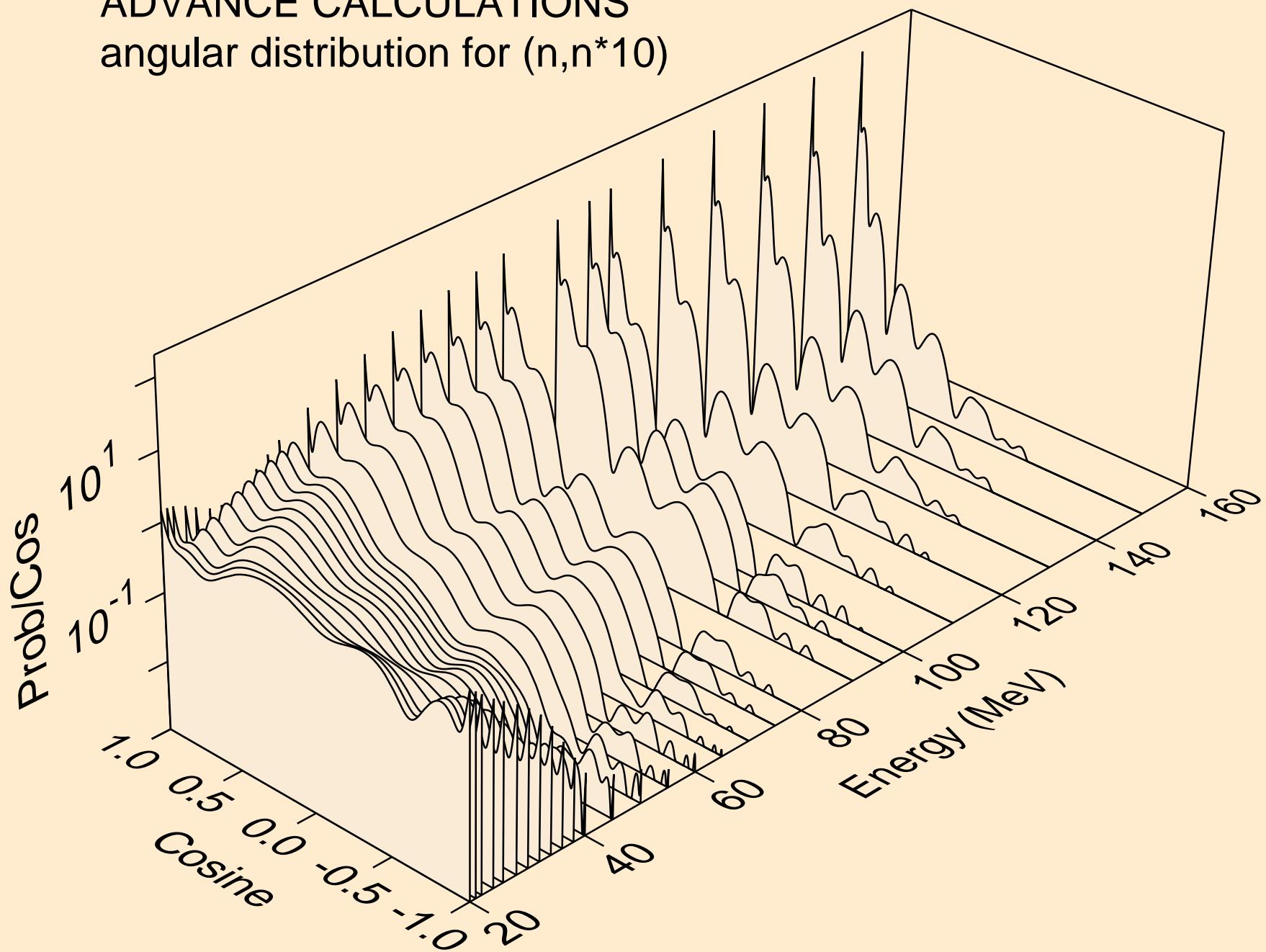
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*10)$



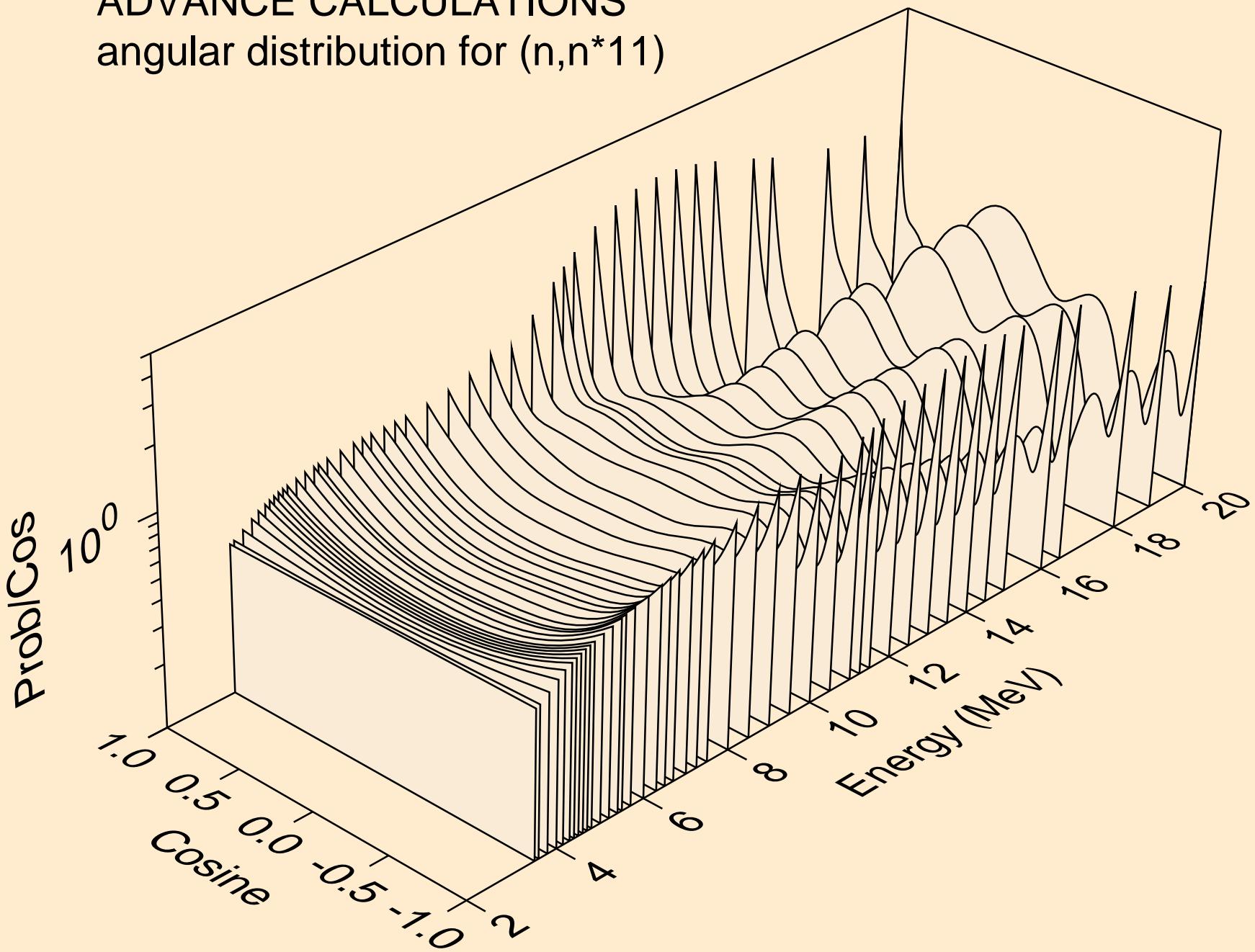
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*10)$



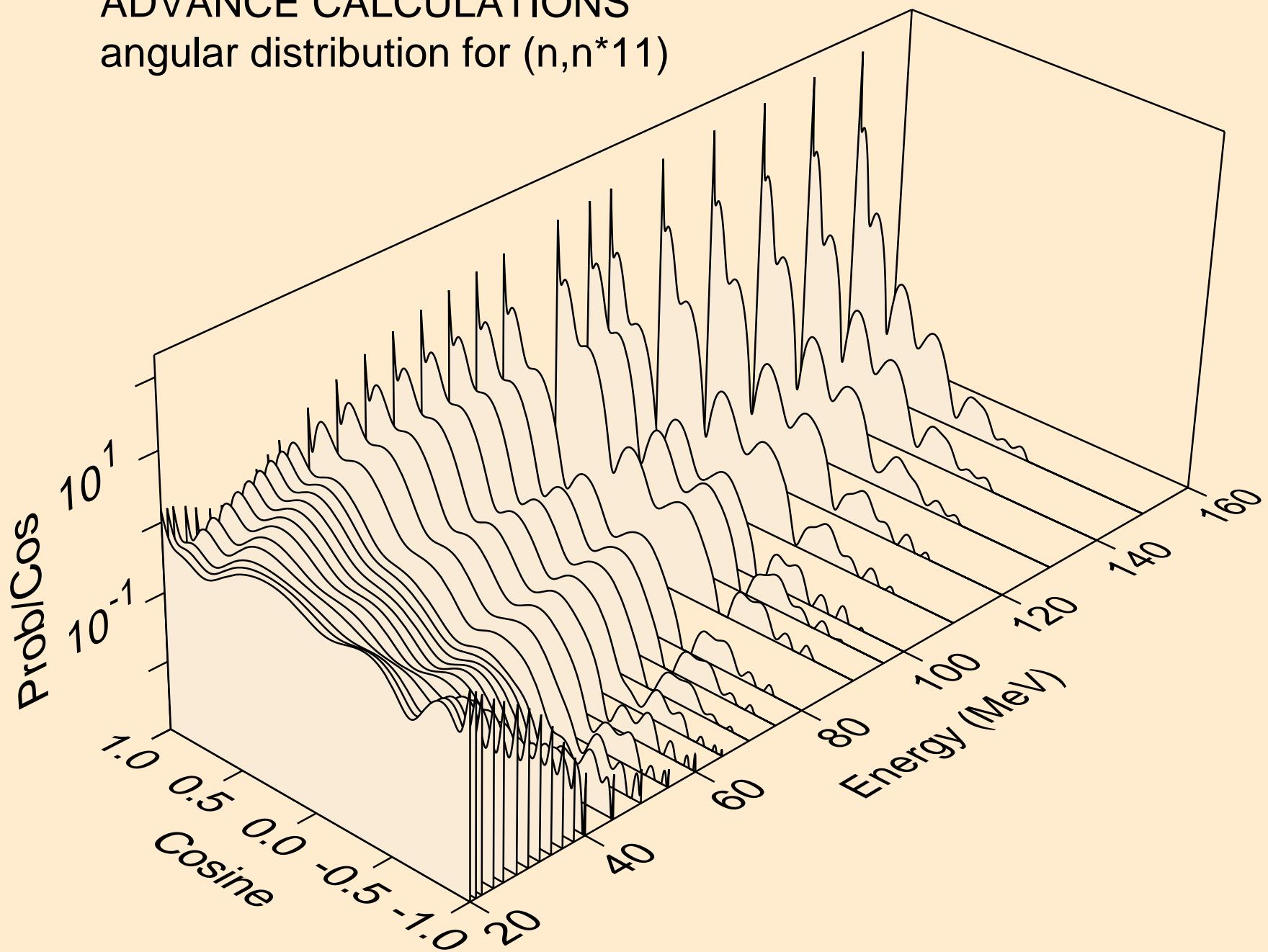
# ADVANCE CALCULATIONS

angular distribution for (n,n\*11)



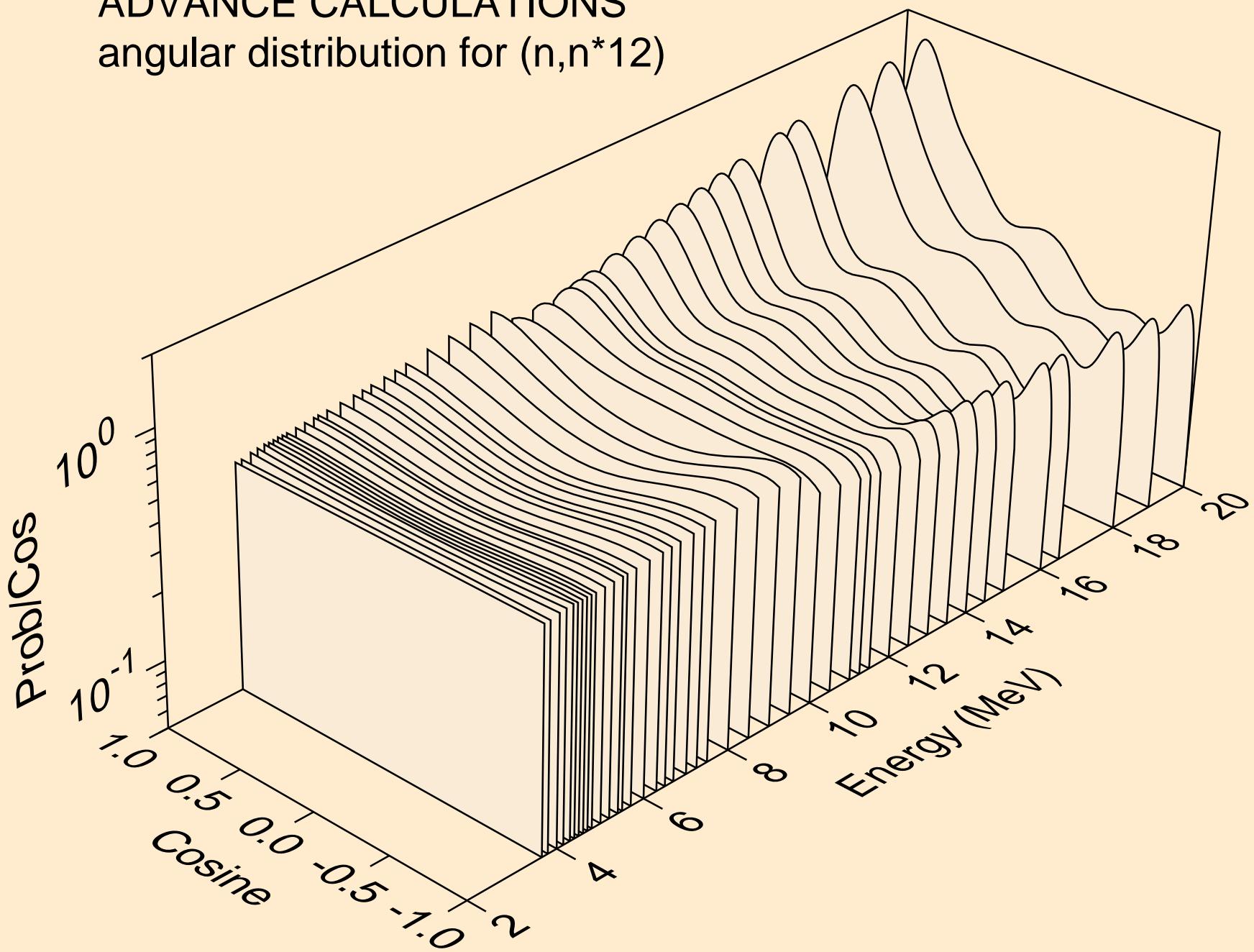
# ADVANCE CALCULATIONS

## angular distribution for ( $n, n^* 11$ )



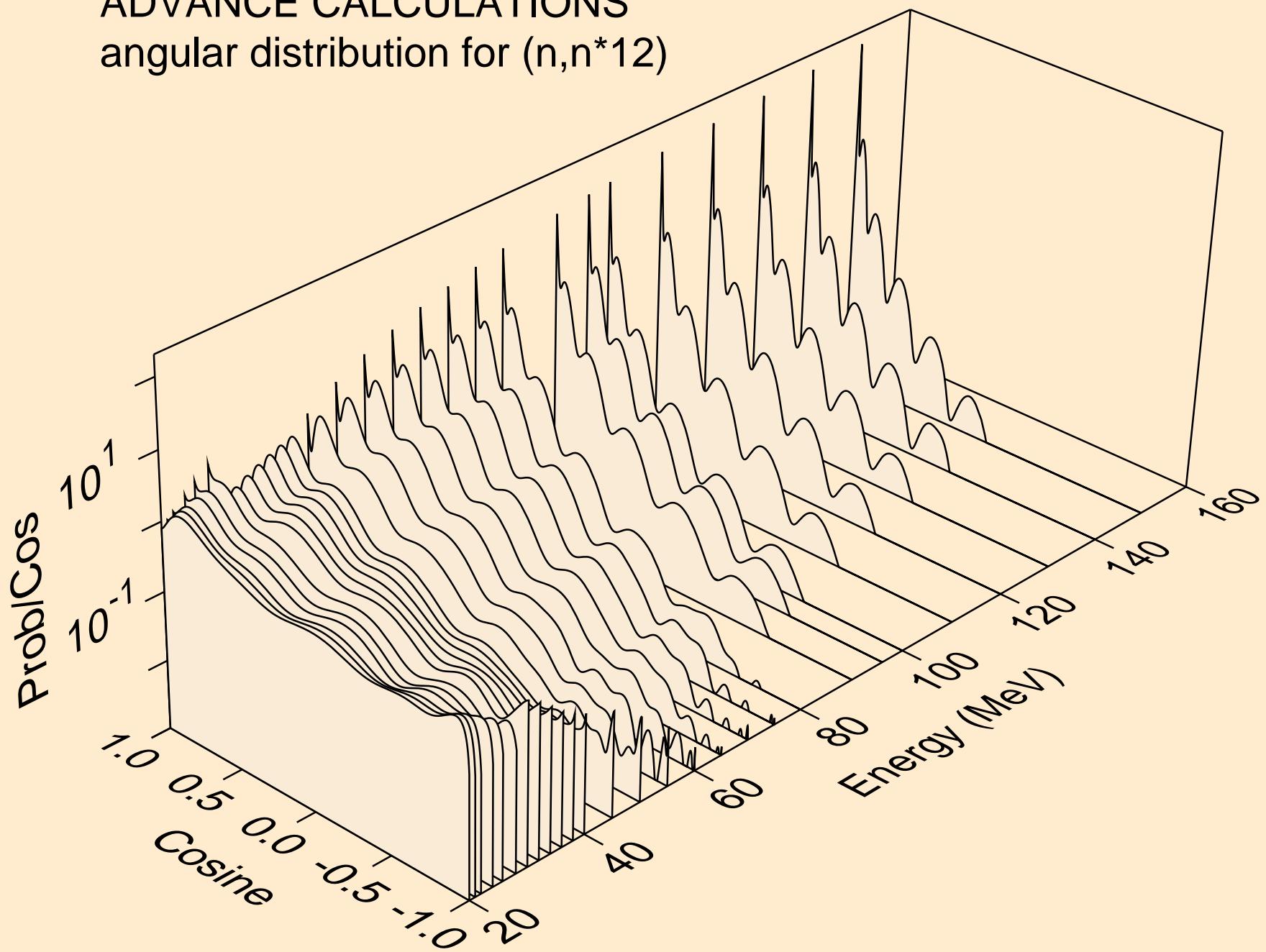
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*12)$



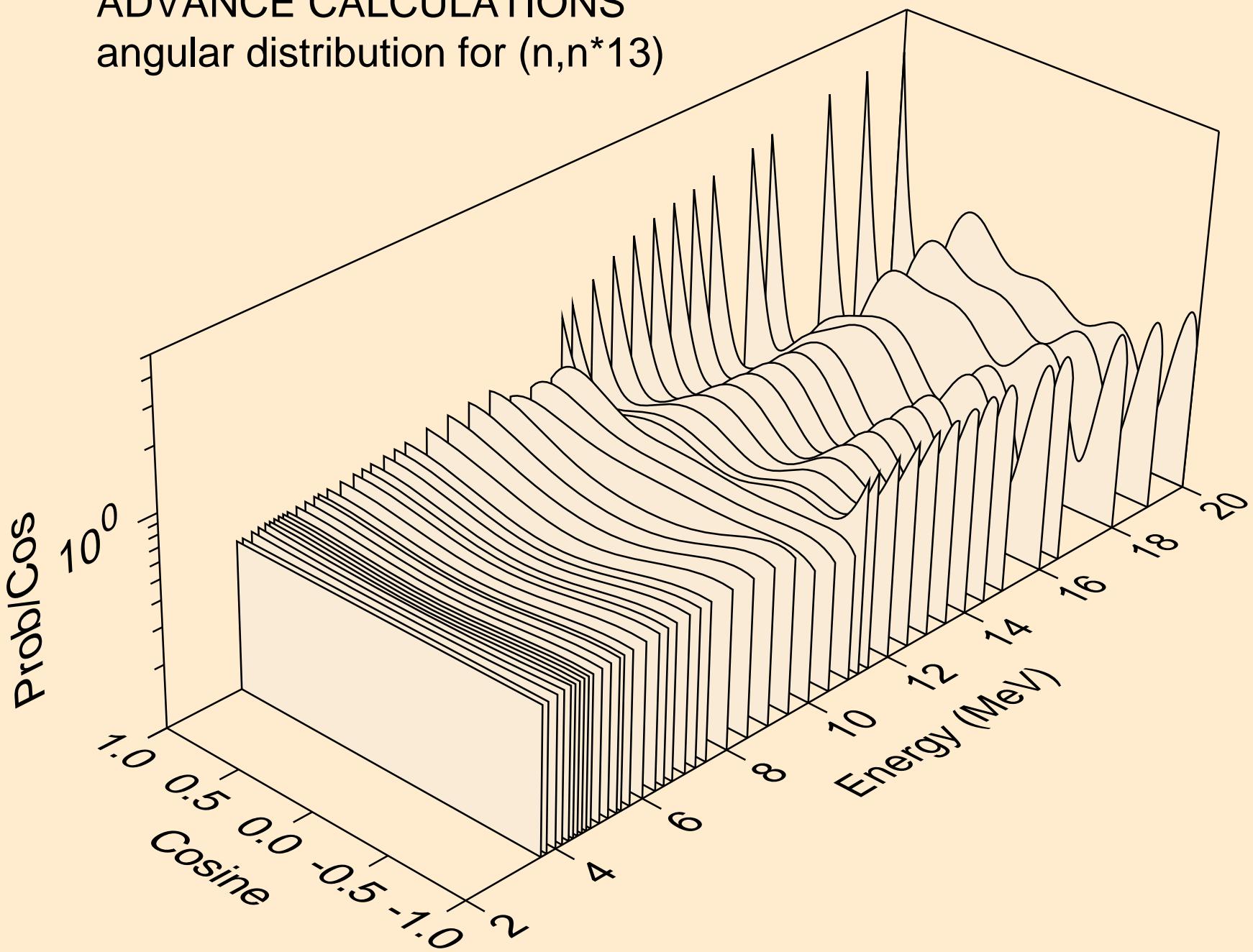
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*12)$



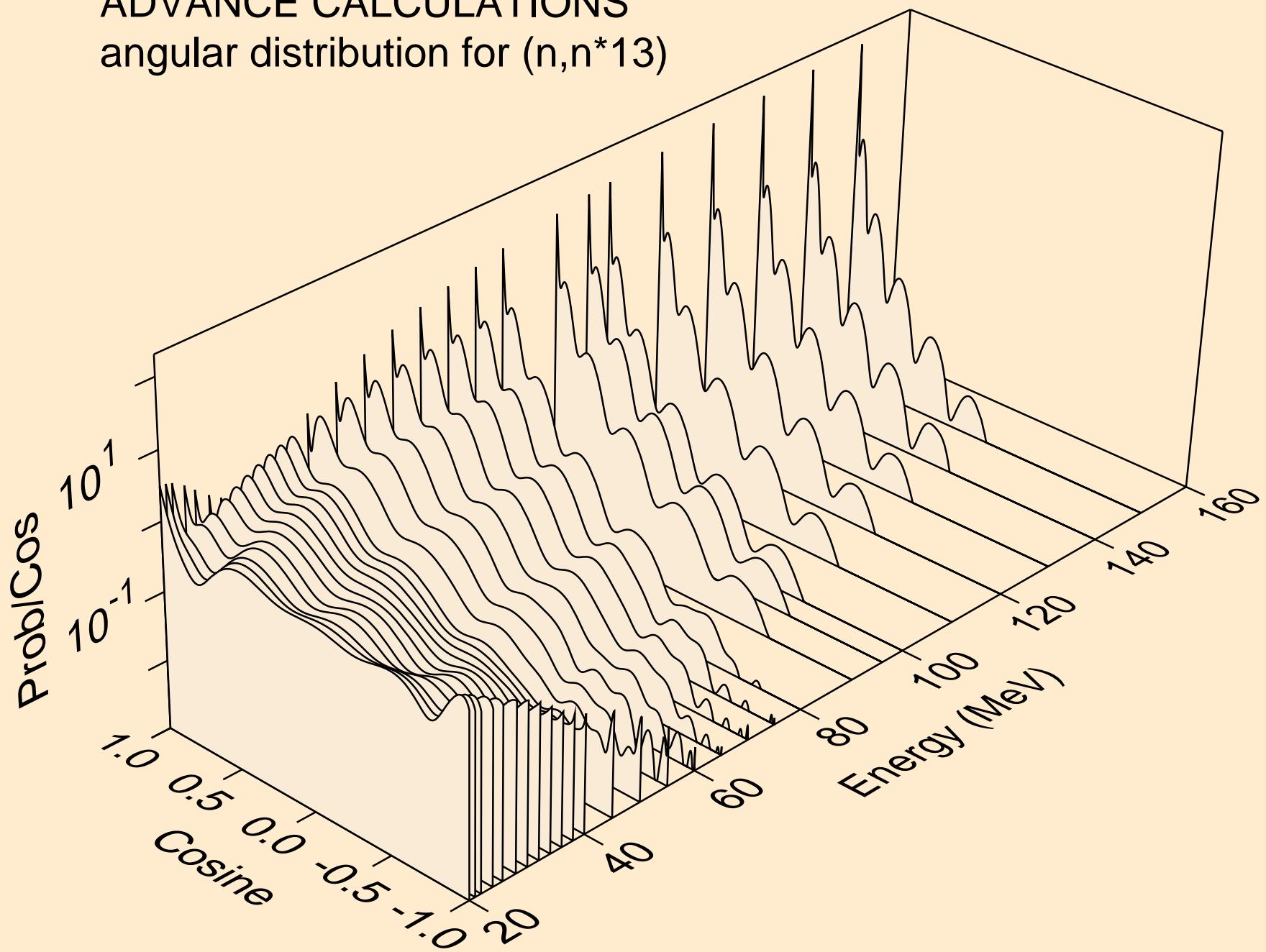
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*13)$



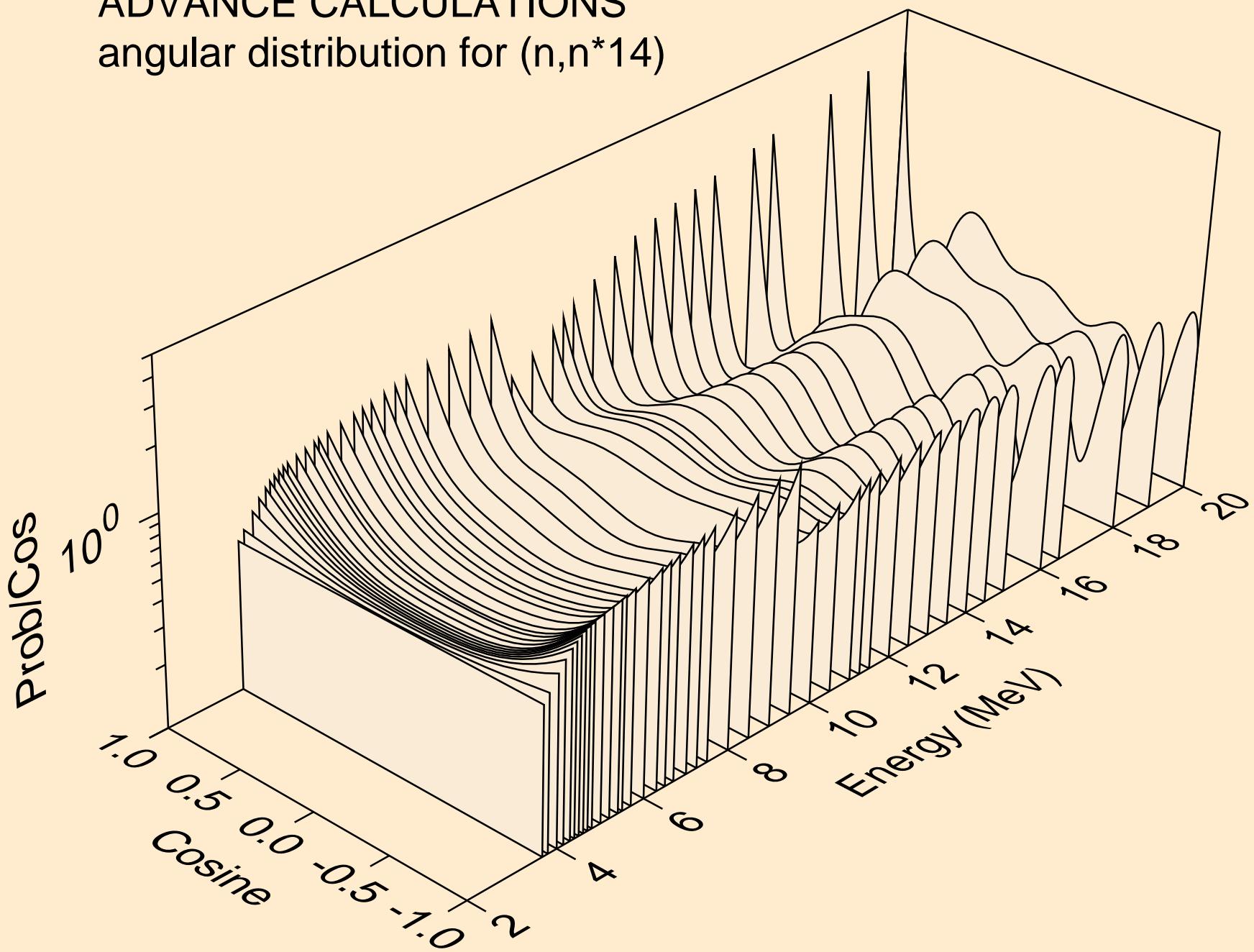
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*13)$



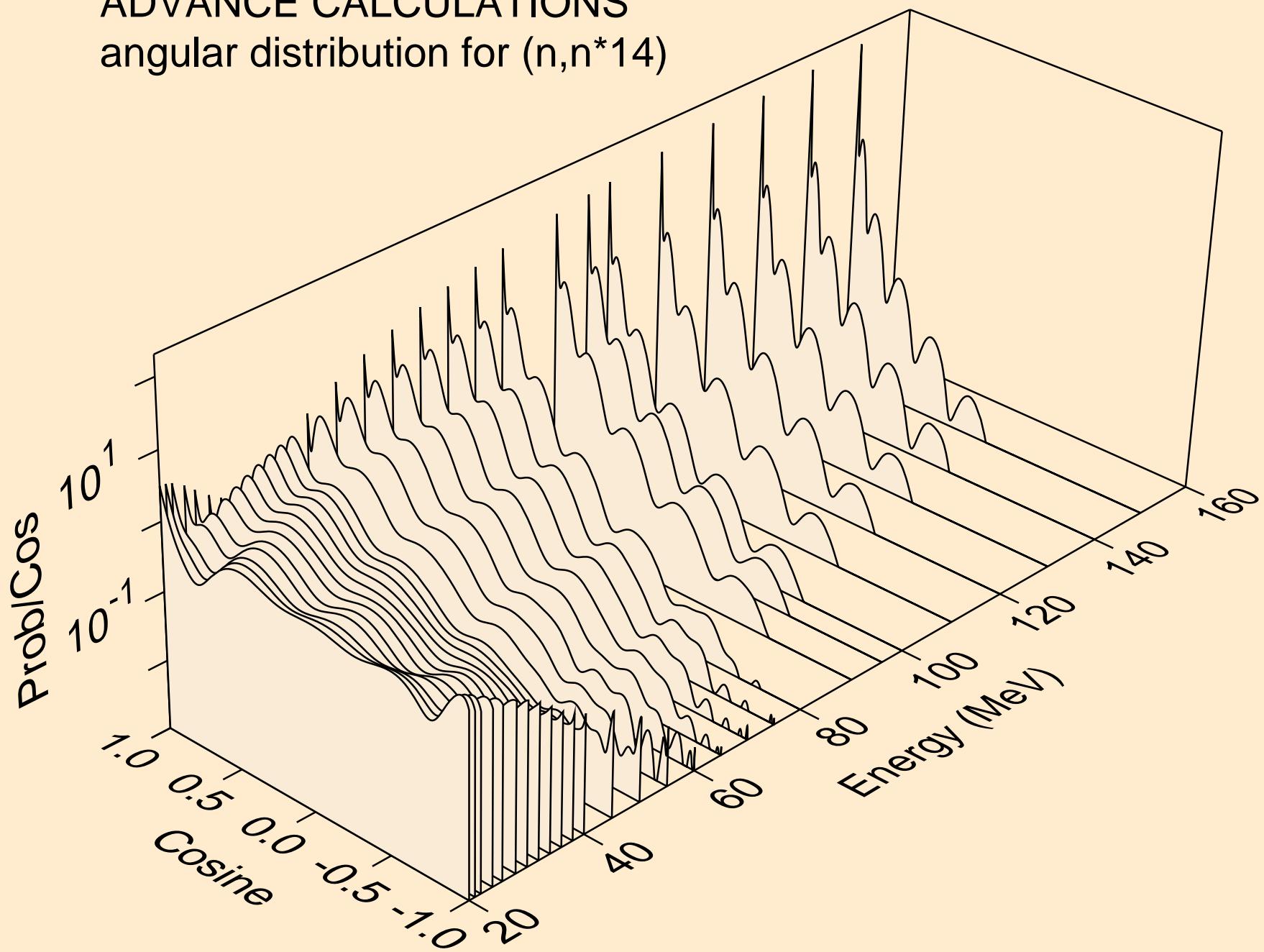
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*14)$



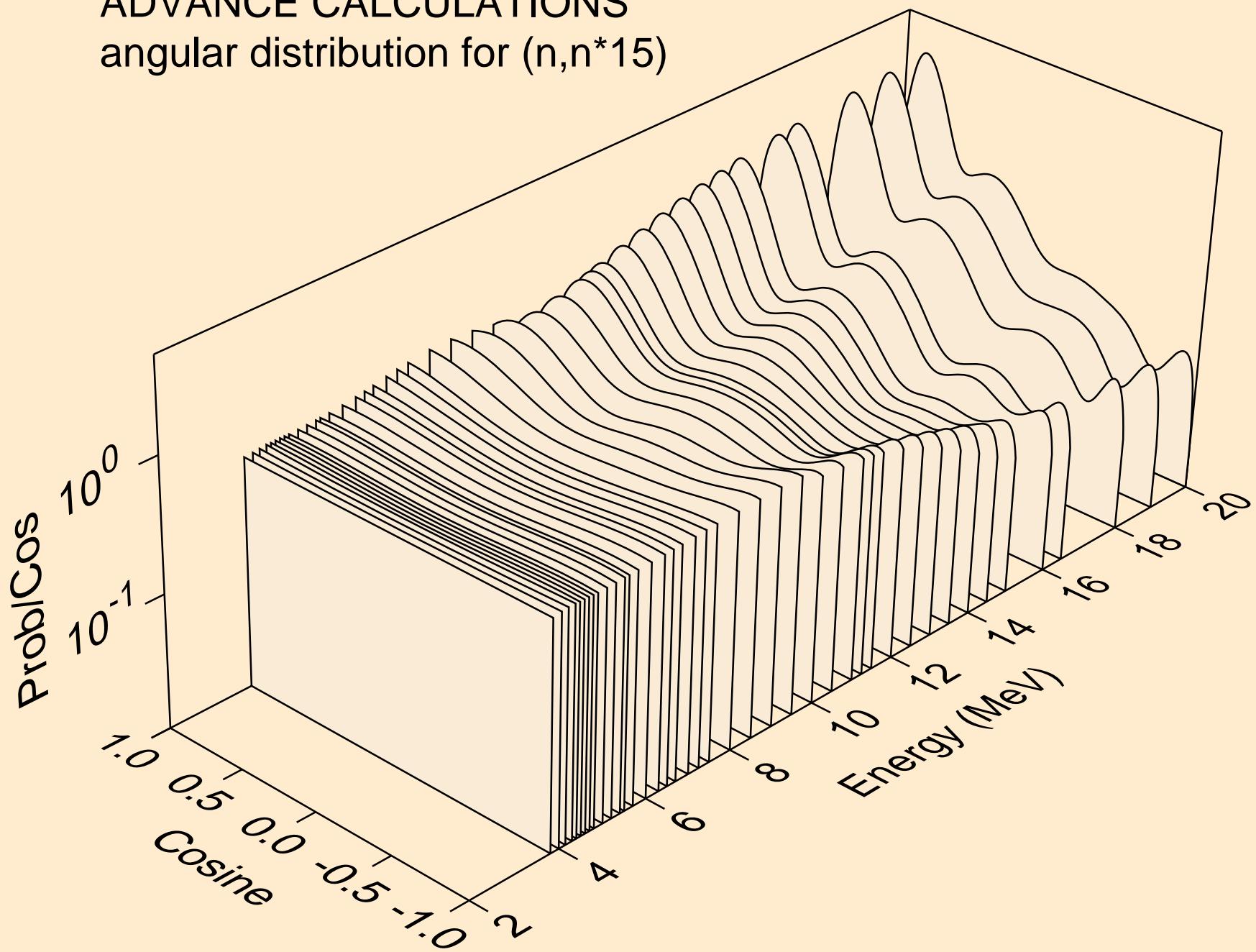
# ADVANCE CALCULATIONS

## angular distribution for ( $n,n^*14$ )



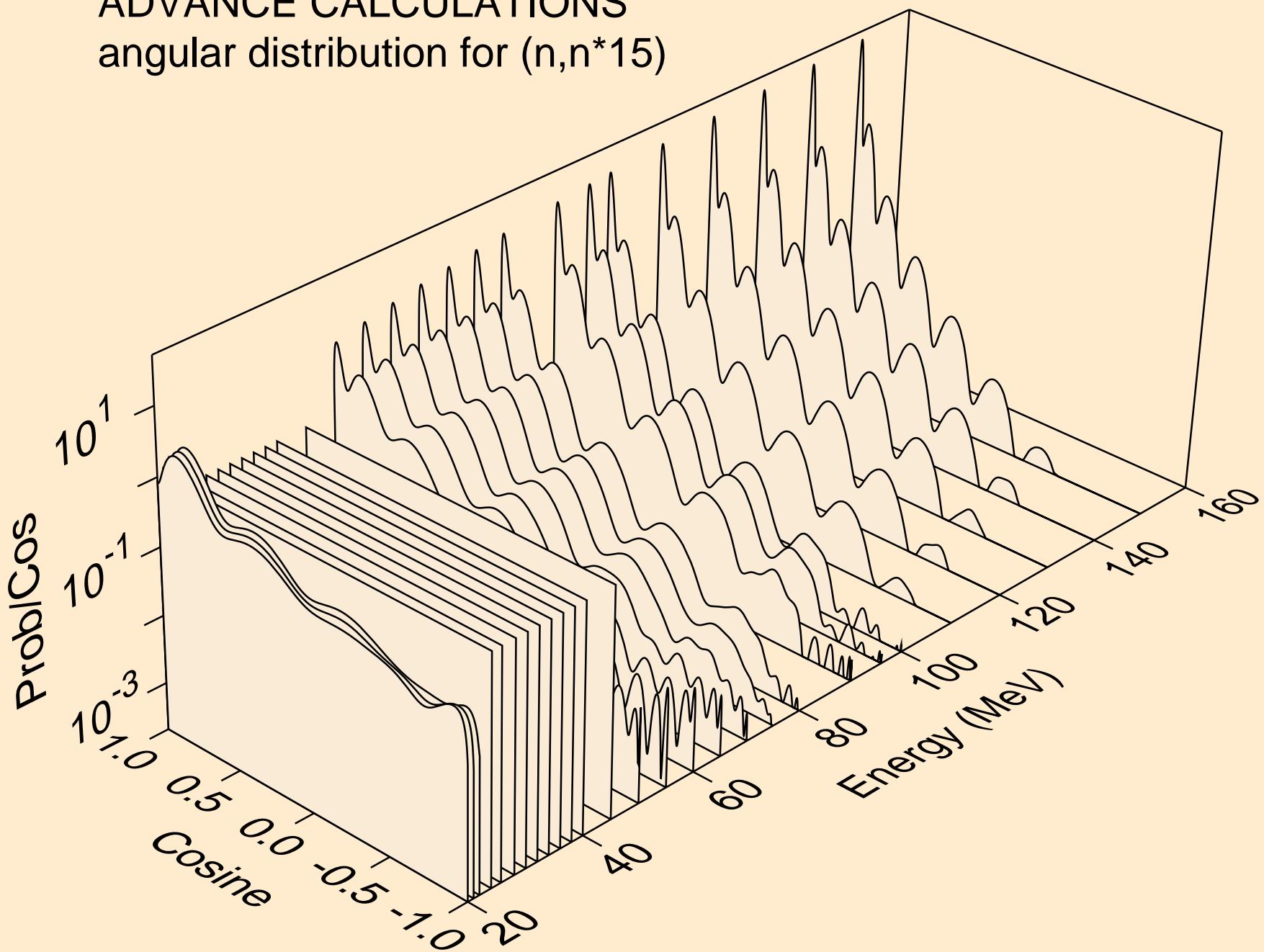
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*15)$



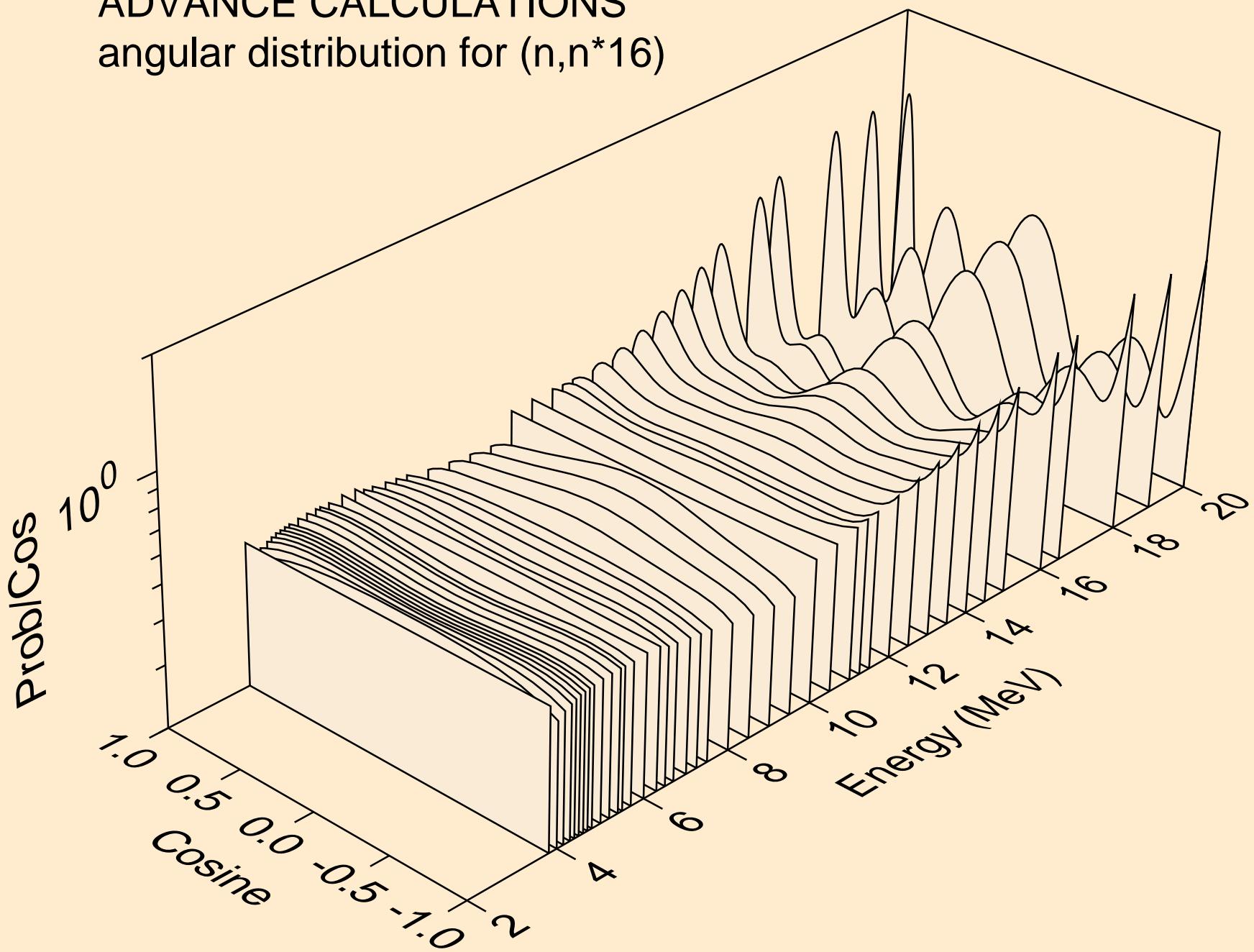
# ADVANCE CALCULATIONS

## angular distribution for (n,n\*15)



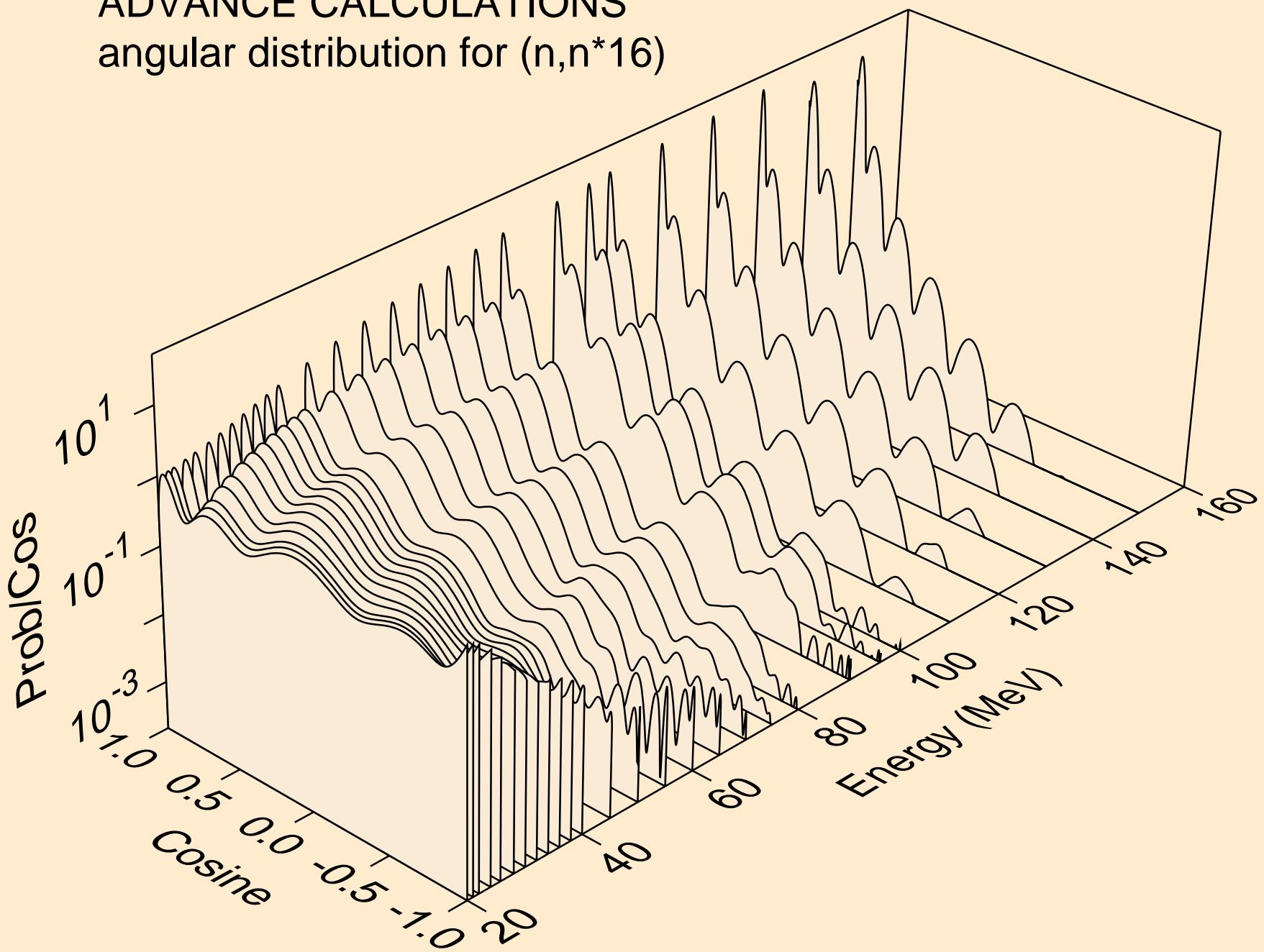
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*16)$



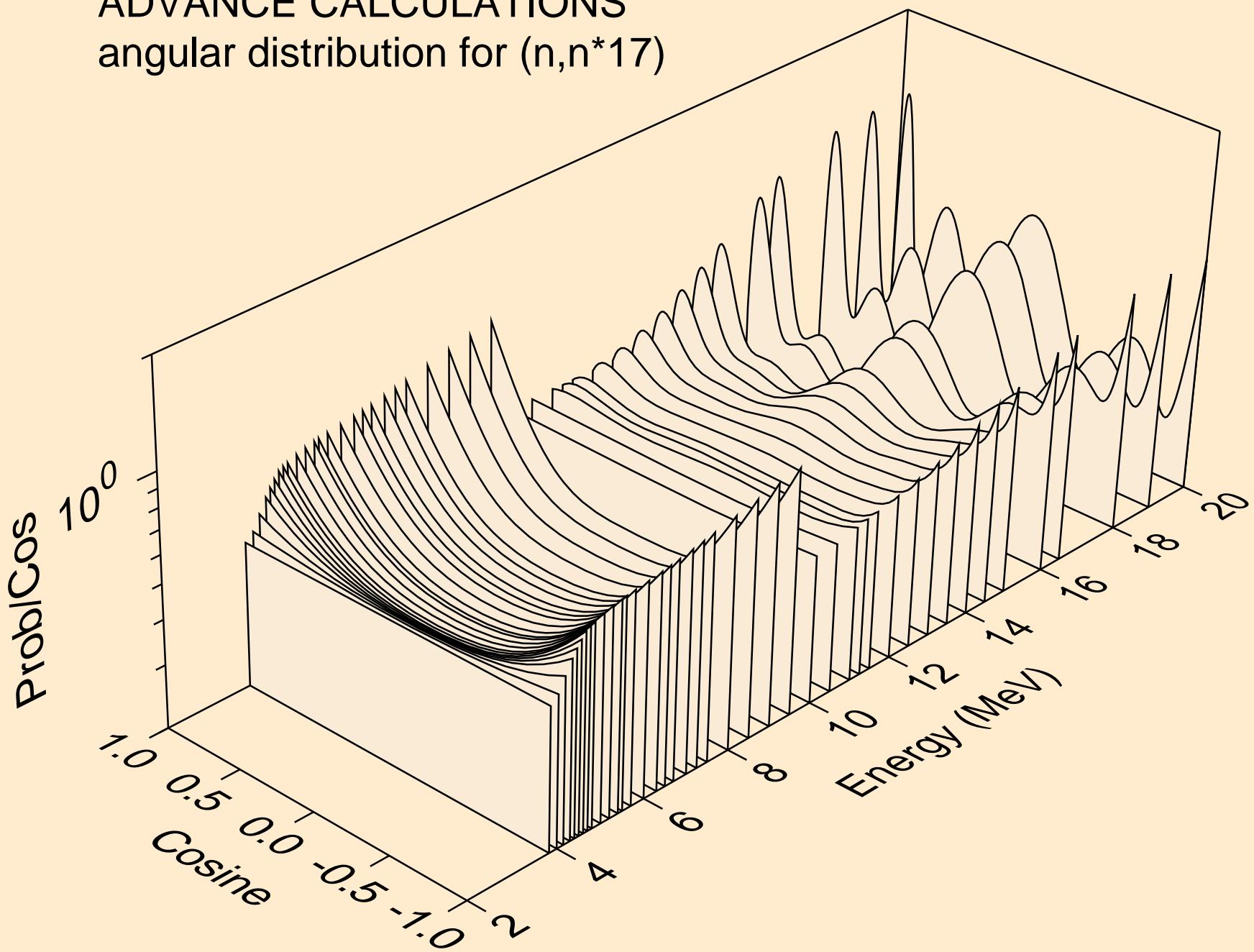
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*16)$



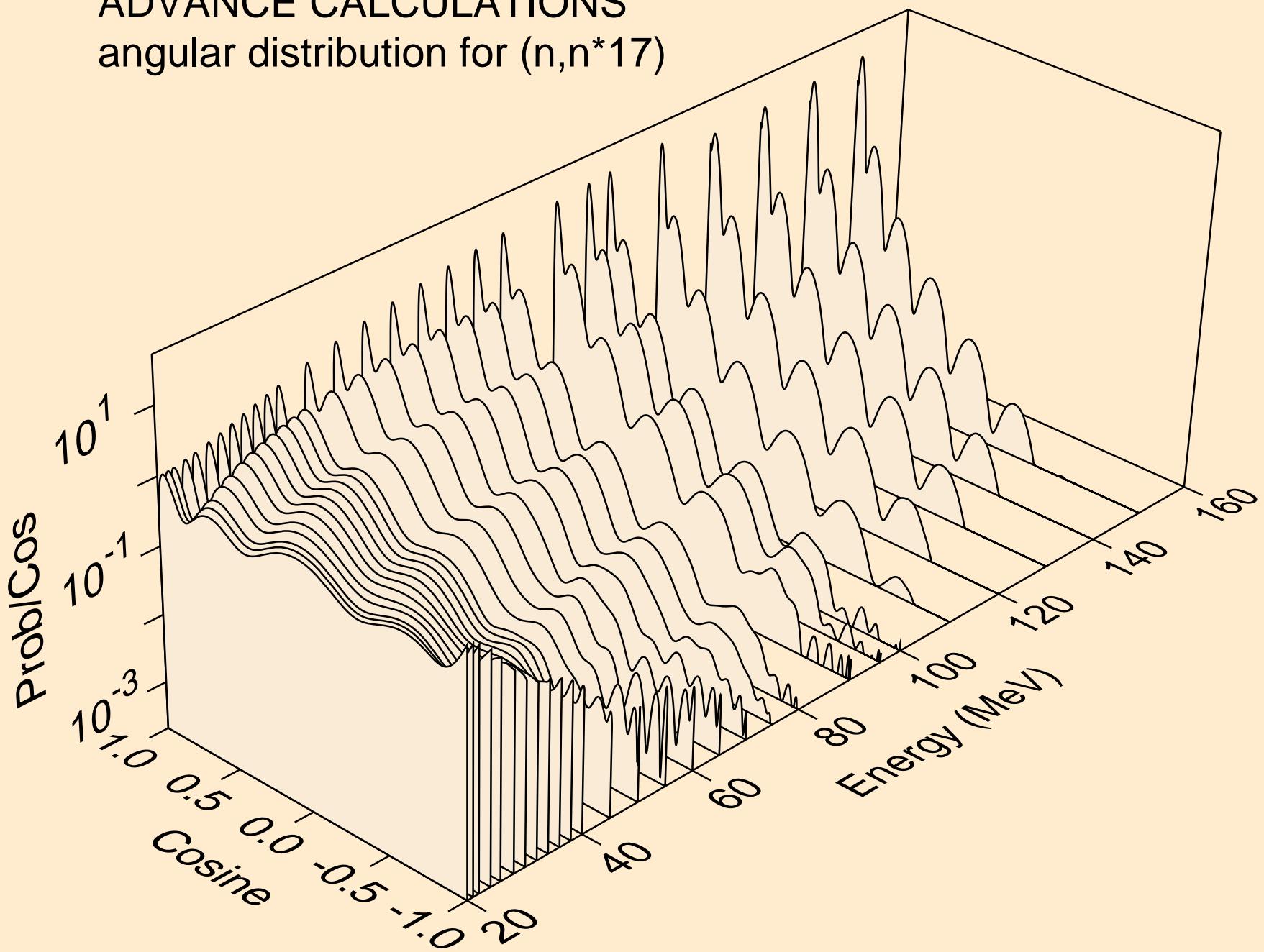
# ADVANCE CALCULATIONS

## angular distribution for ( $n, n^* 17$ )



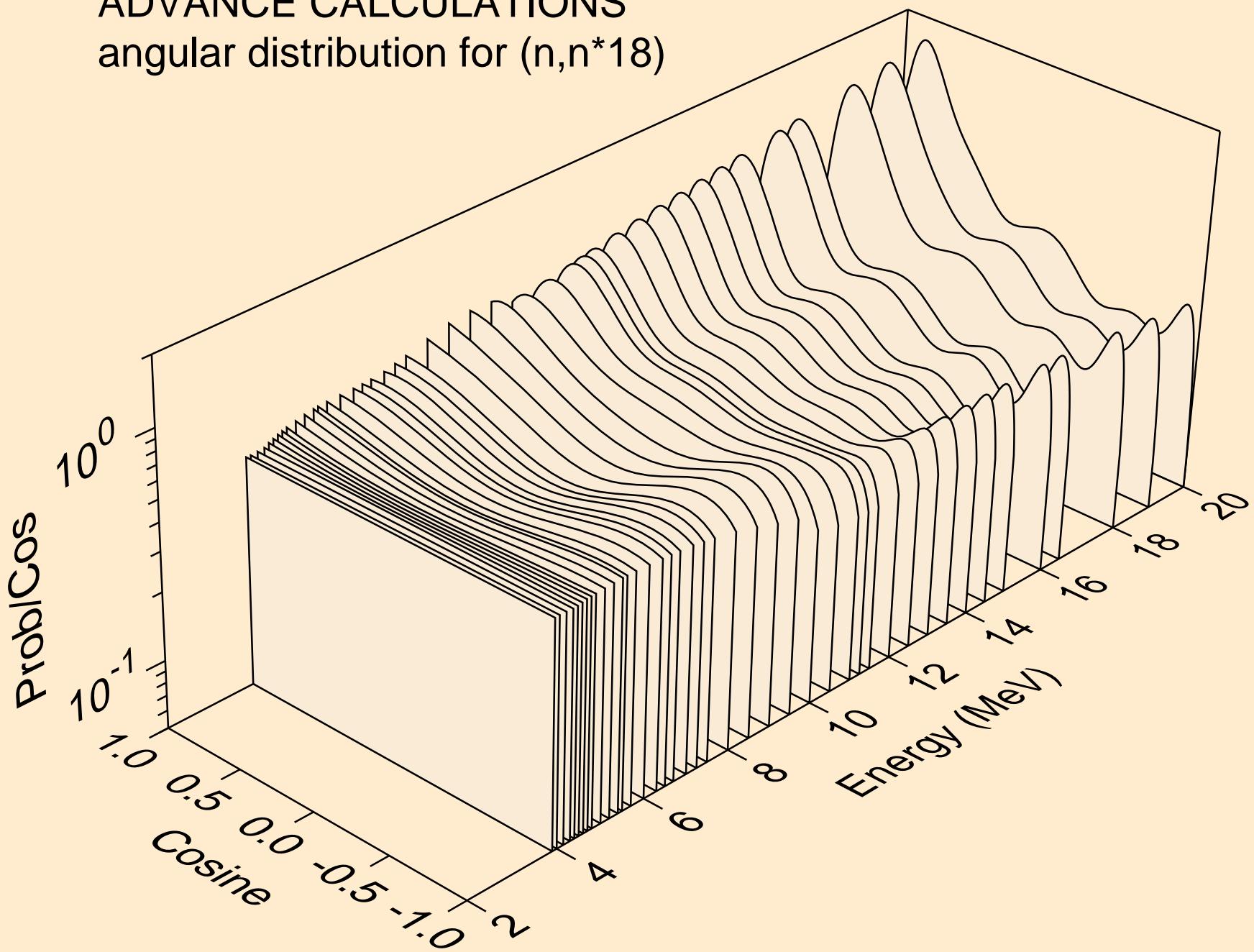
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*17)$



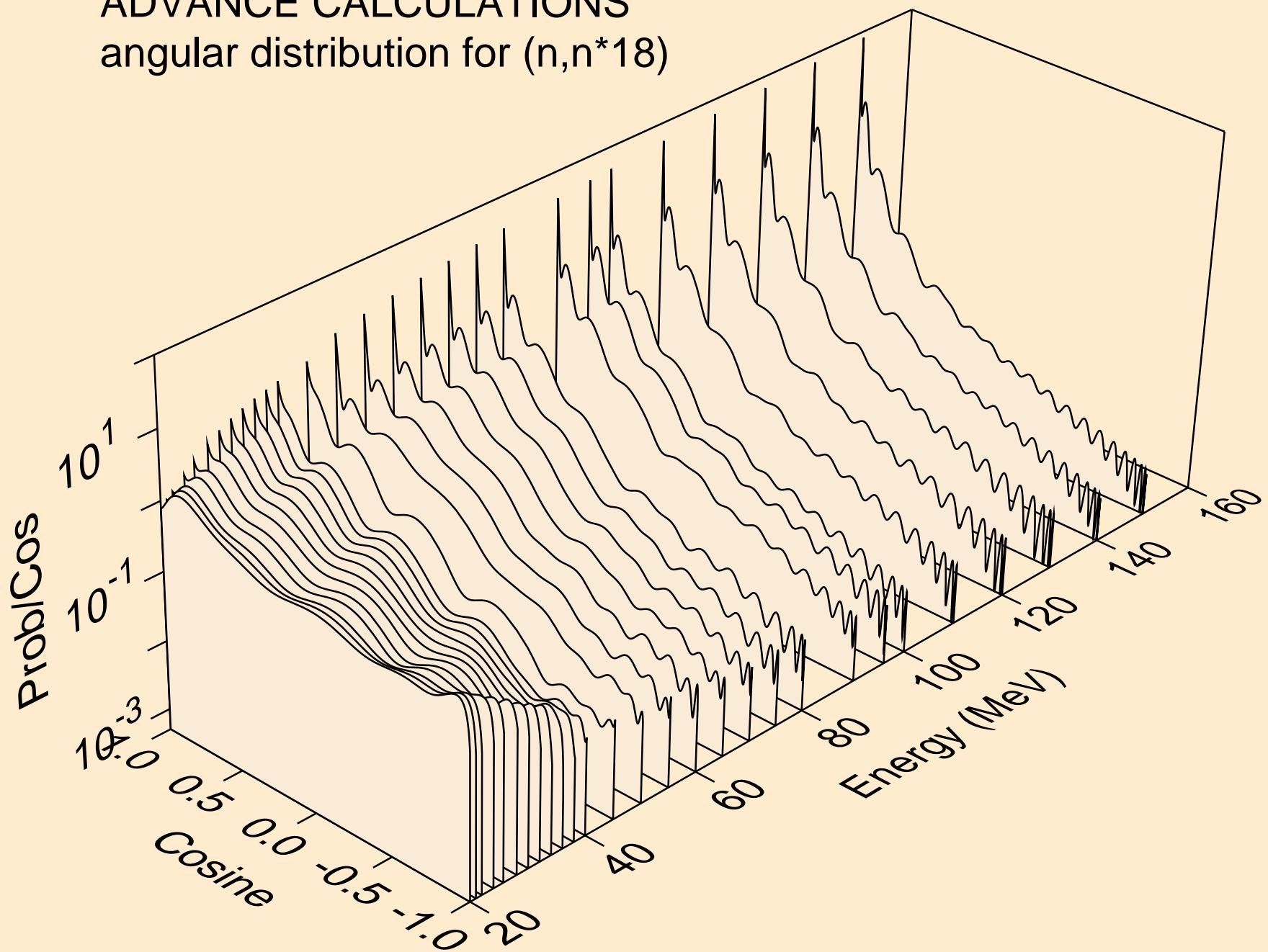
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*18)$



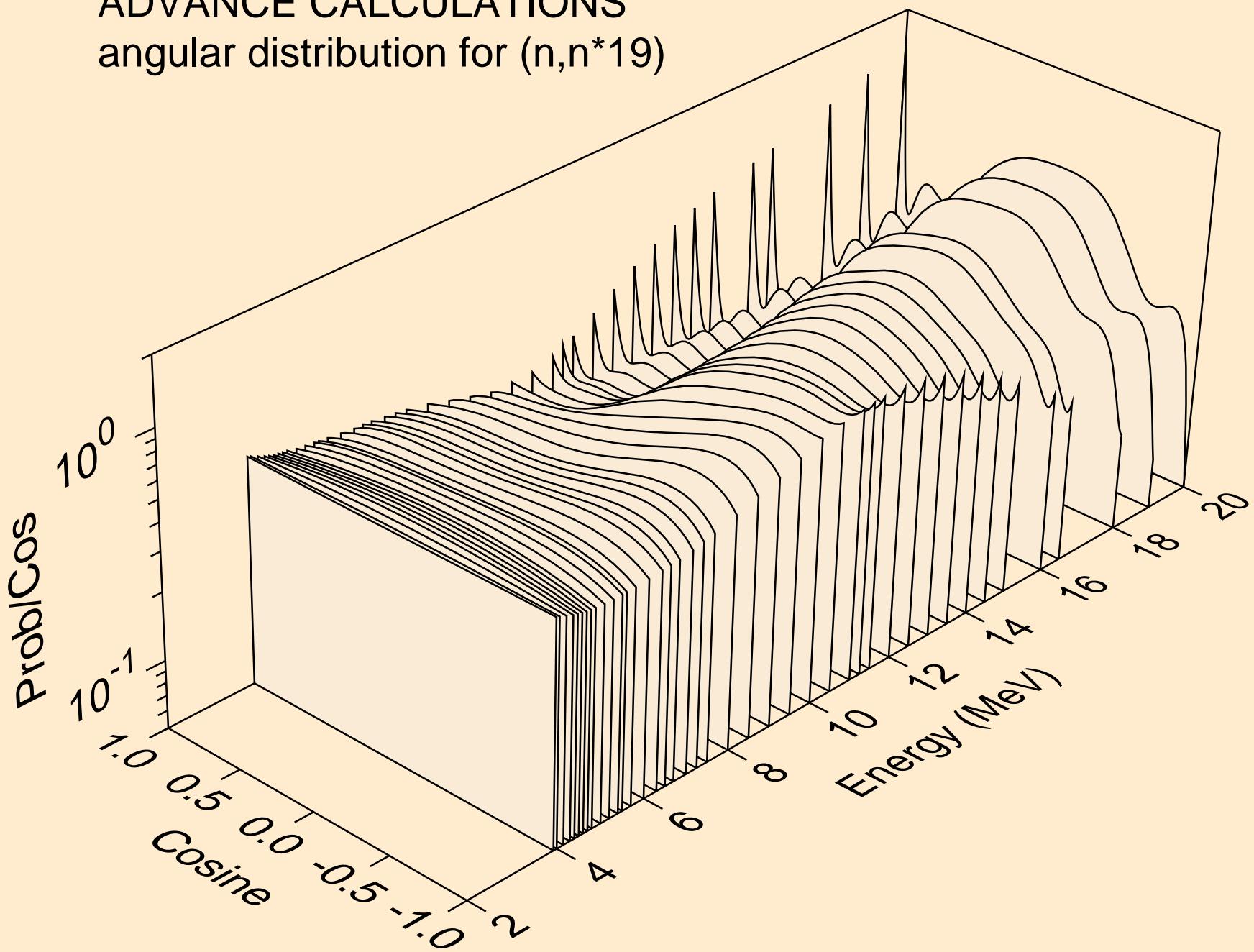
# ADVANCE CALCULATIONS

## angular distribution for (n,n\*18)



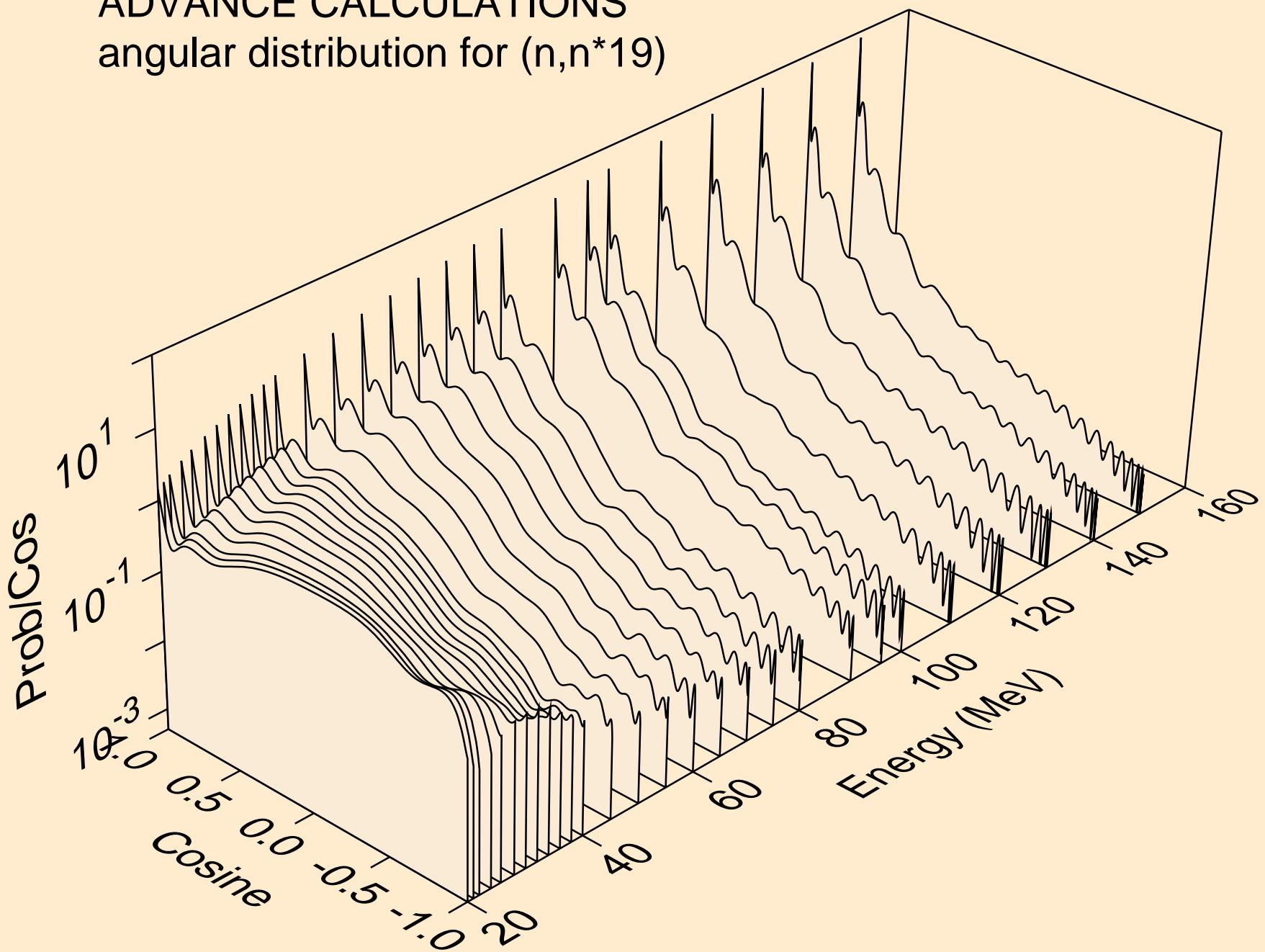
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*19)$



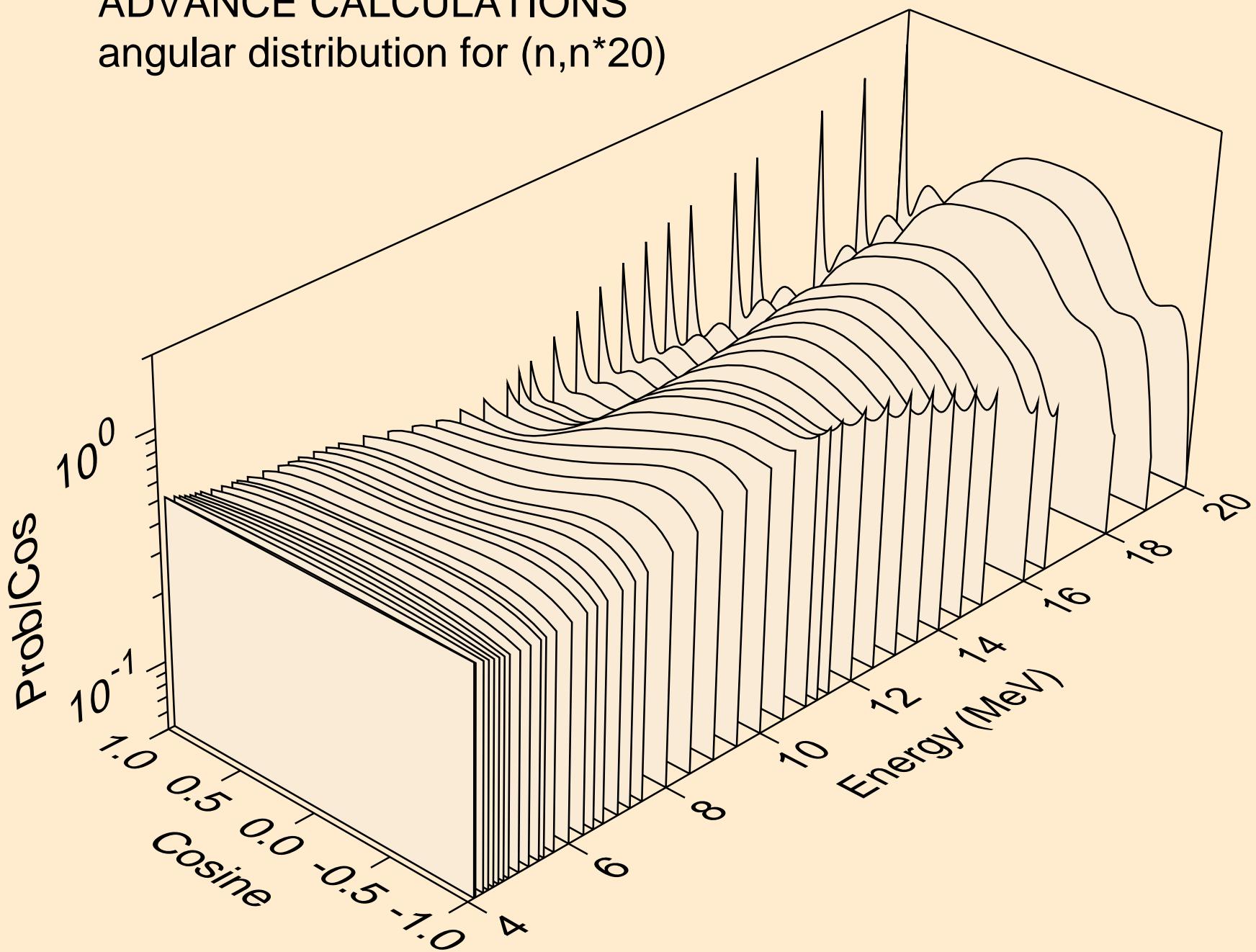
# ADVANCE CALCULATIONS

## angular distribution for (n,n\*19)



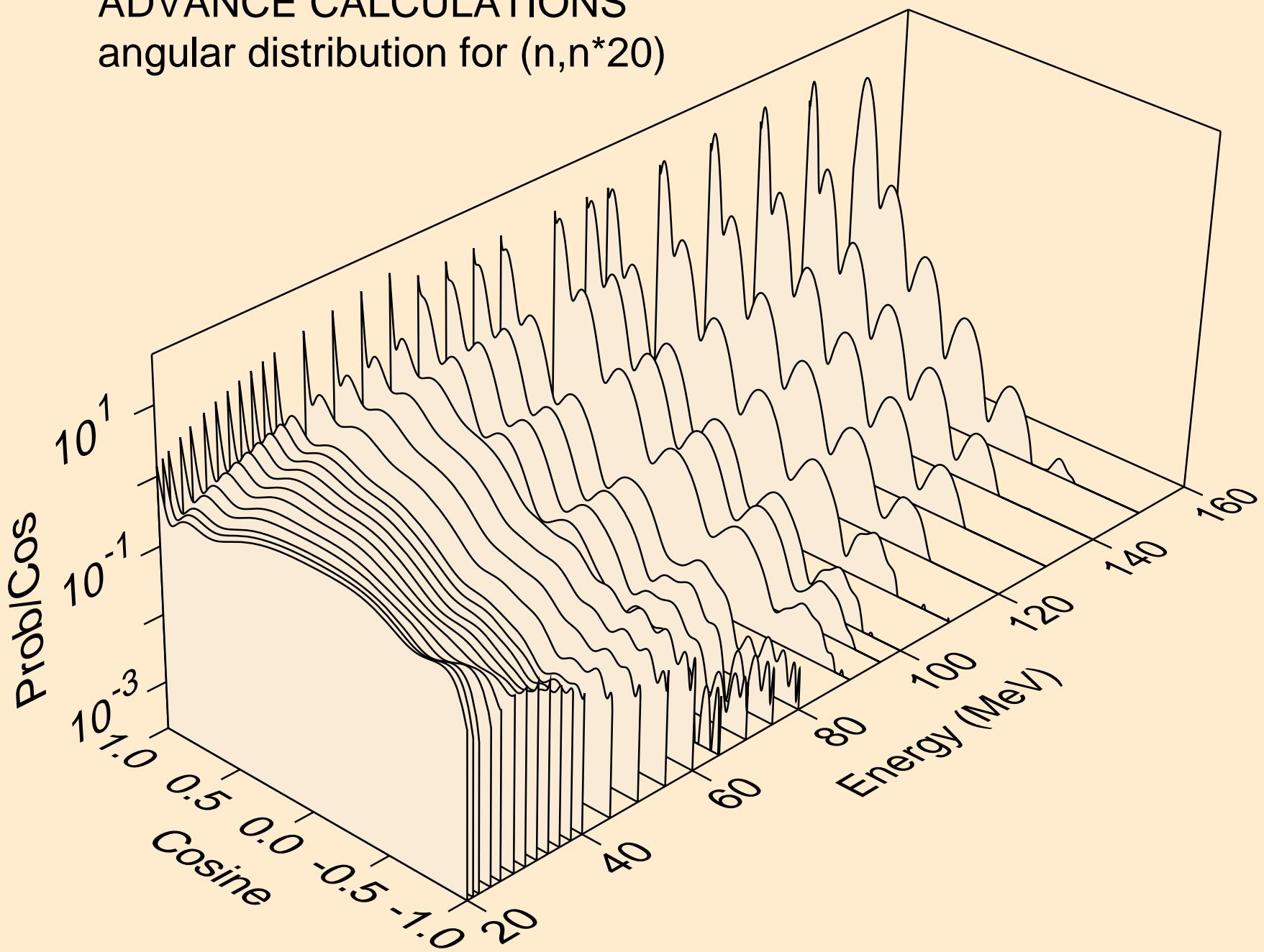
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)20$



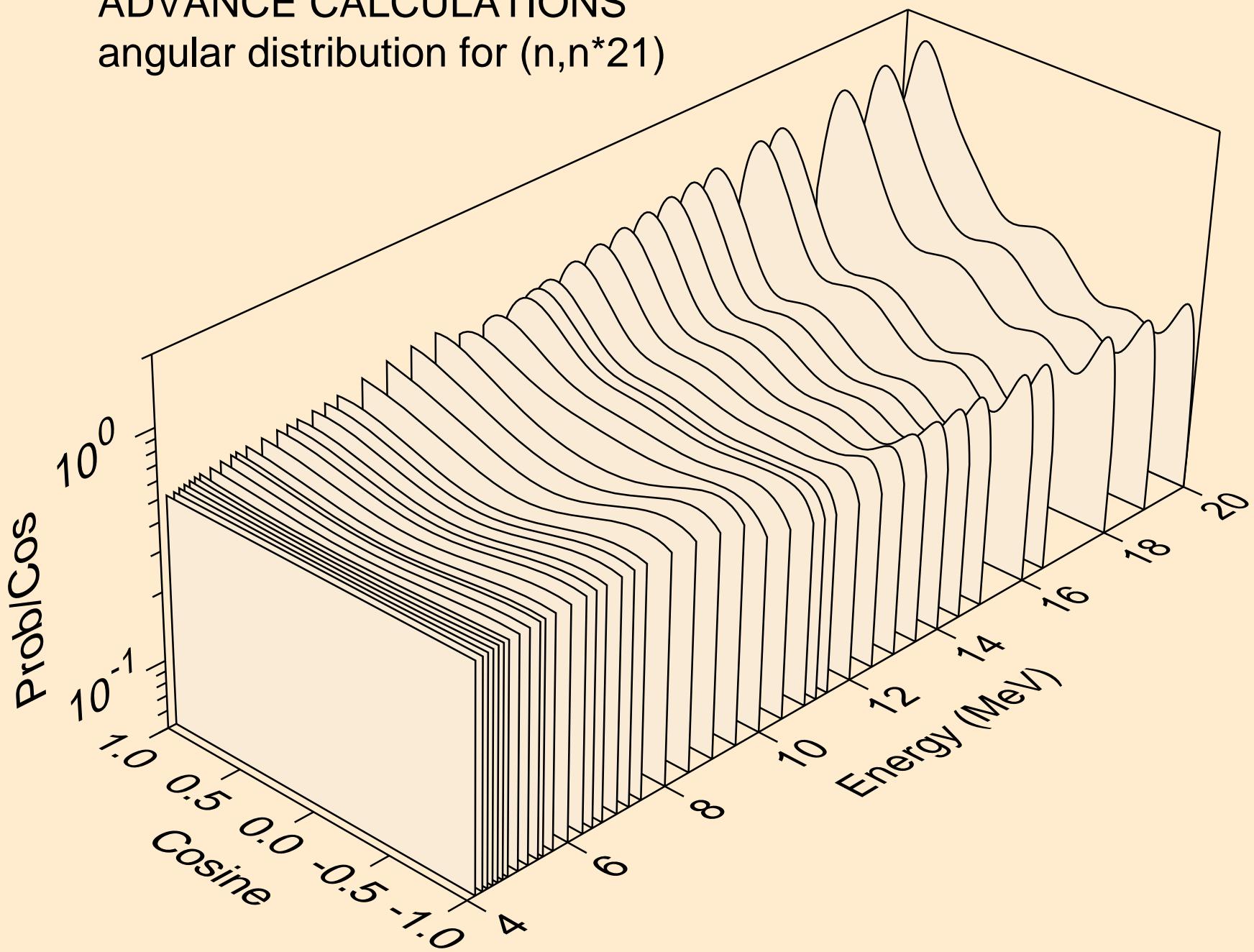
# ADVANCE CALCULATIONS

## angular distribution for (n,n\*20)



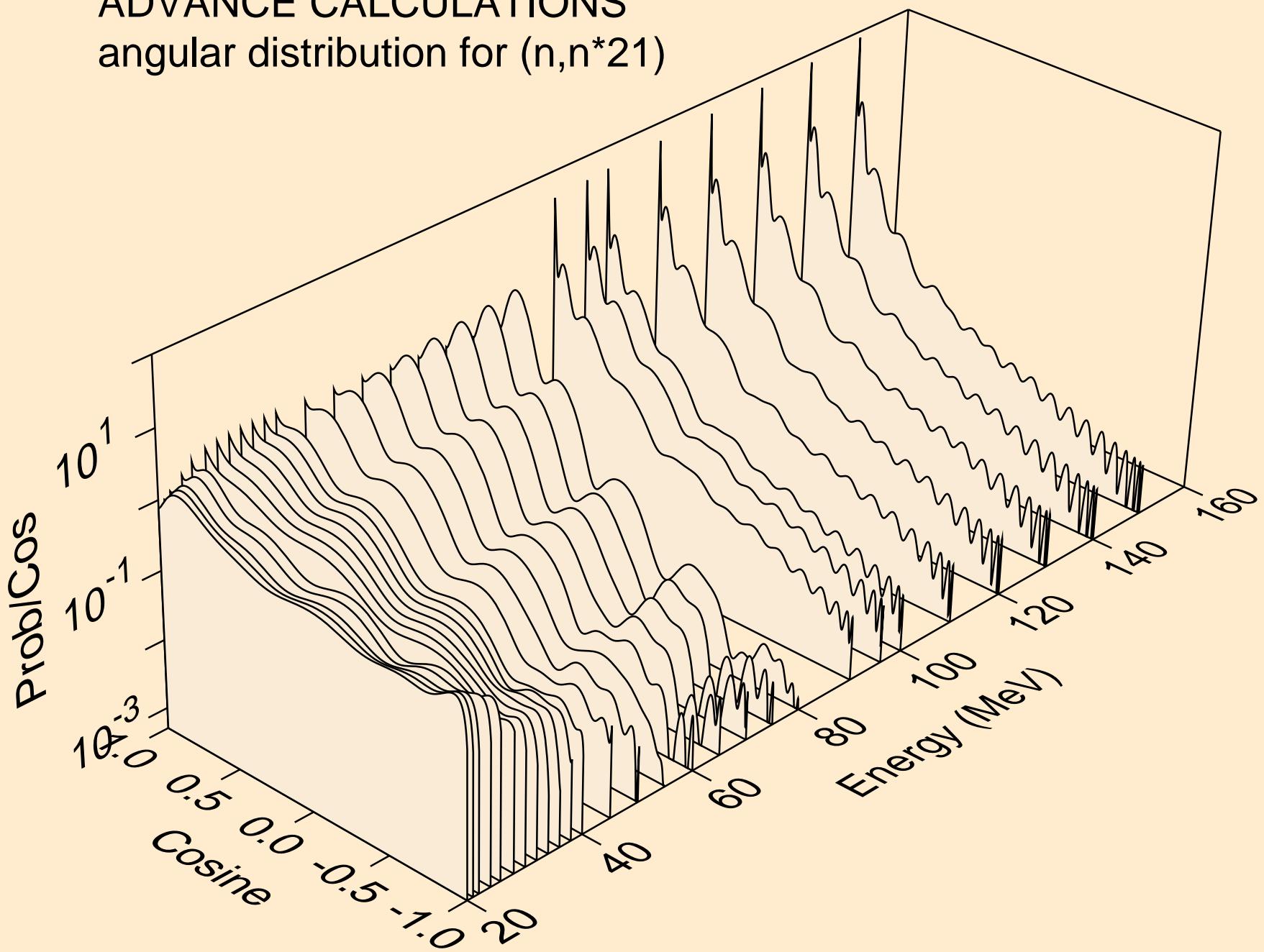
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*21)$



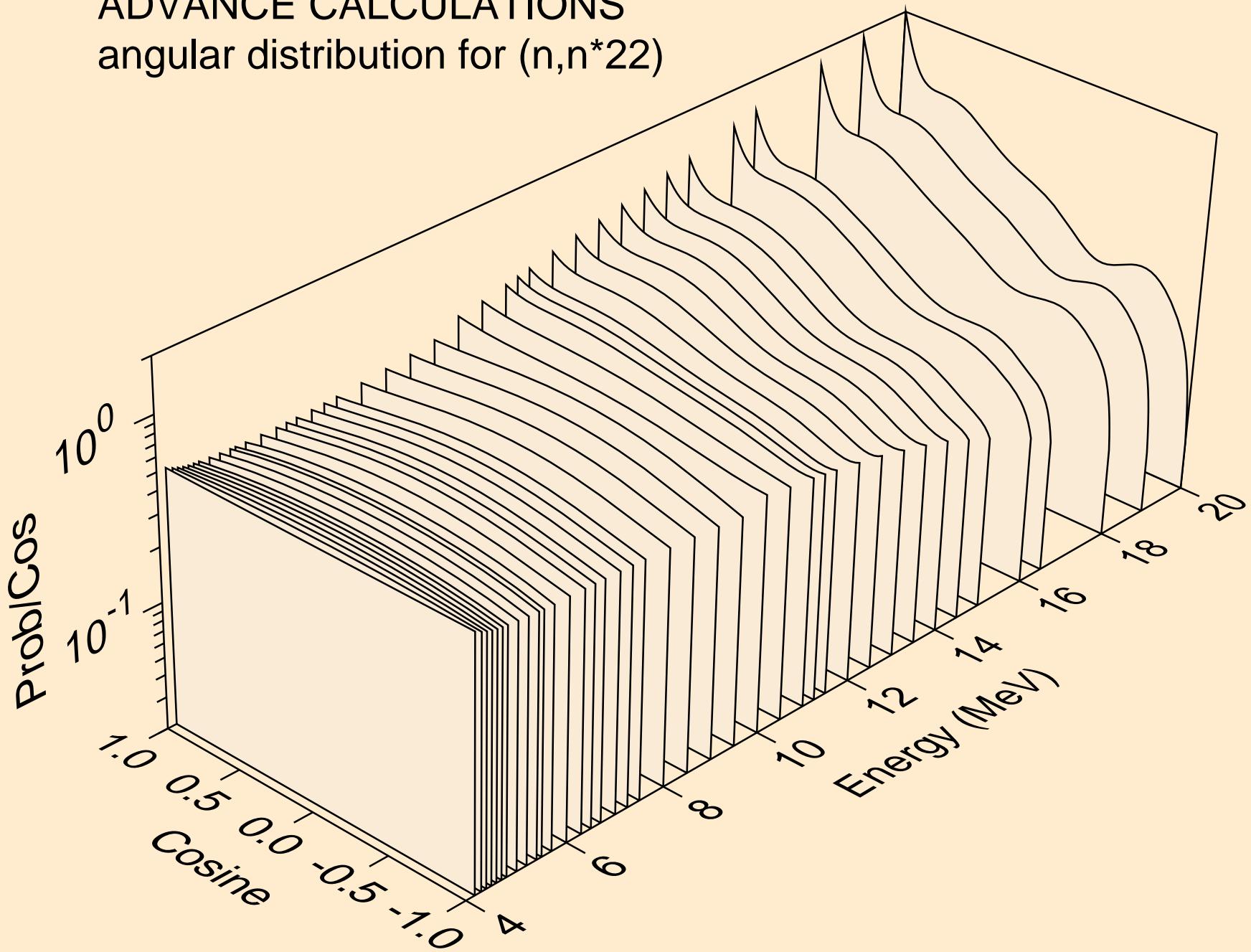
# ADVANCE CALCULATIONS

## angular distribution for (n,n\*21)



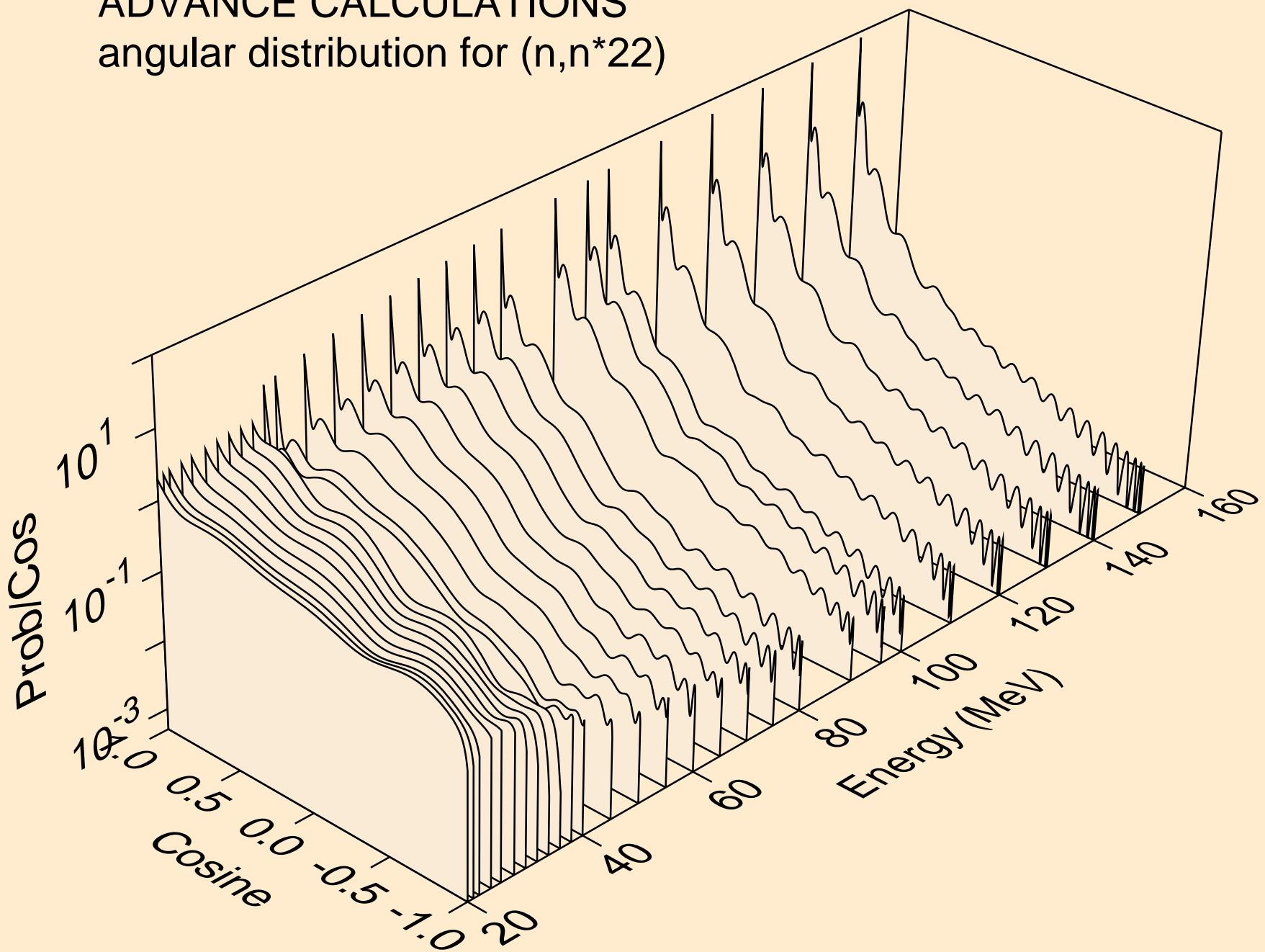
# ADVANCE CALCULATIONS

## angular distribution for $(n,n^*)^{22}$



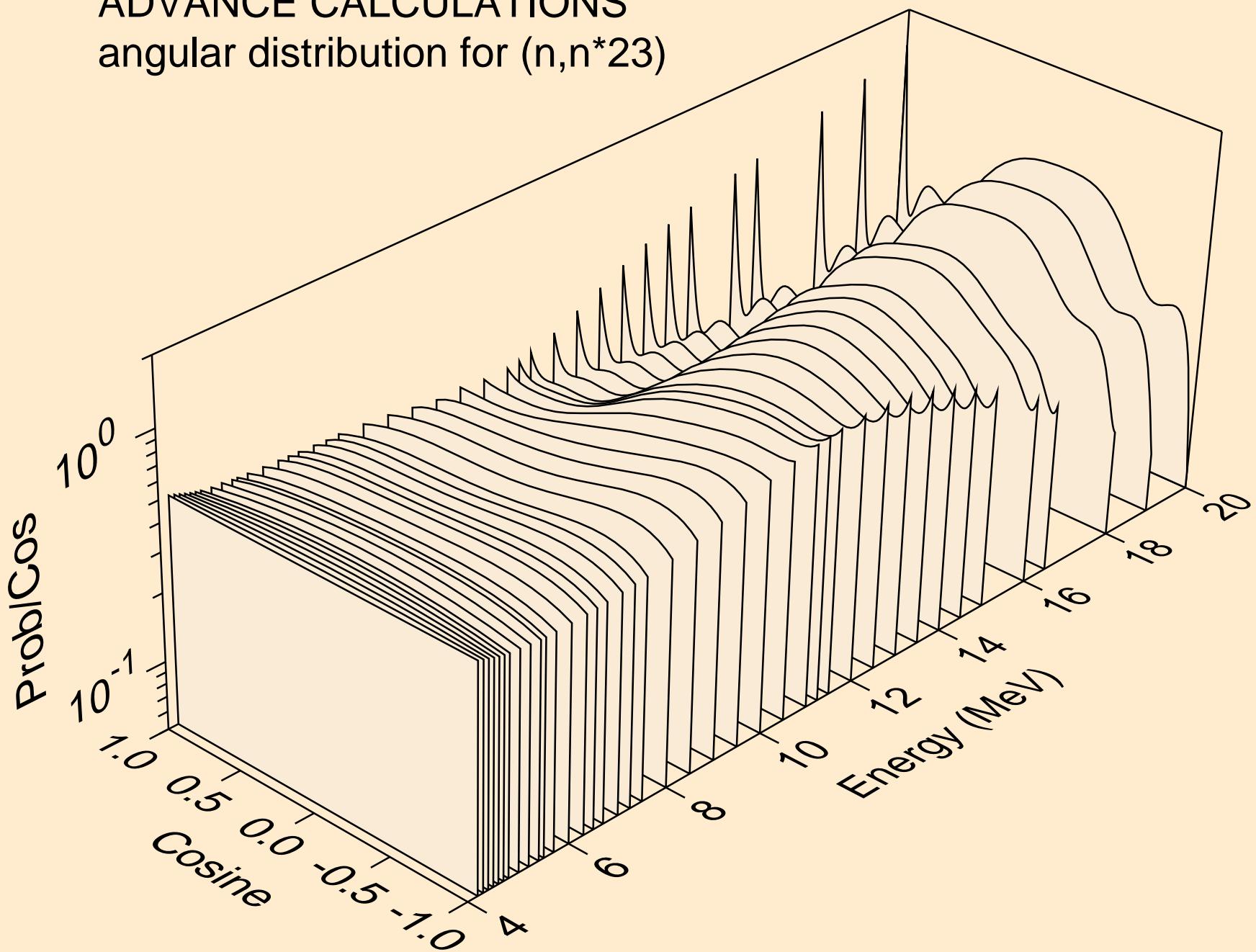
# ADVANCE CALCULATIONS

## angular distribution for ( $n, n^* 22$ )



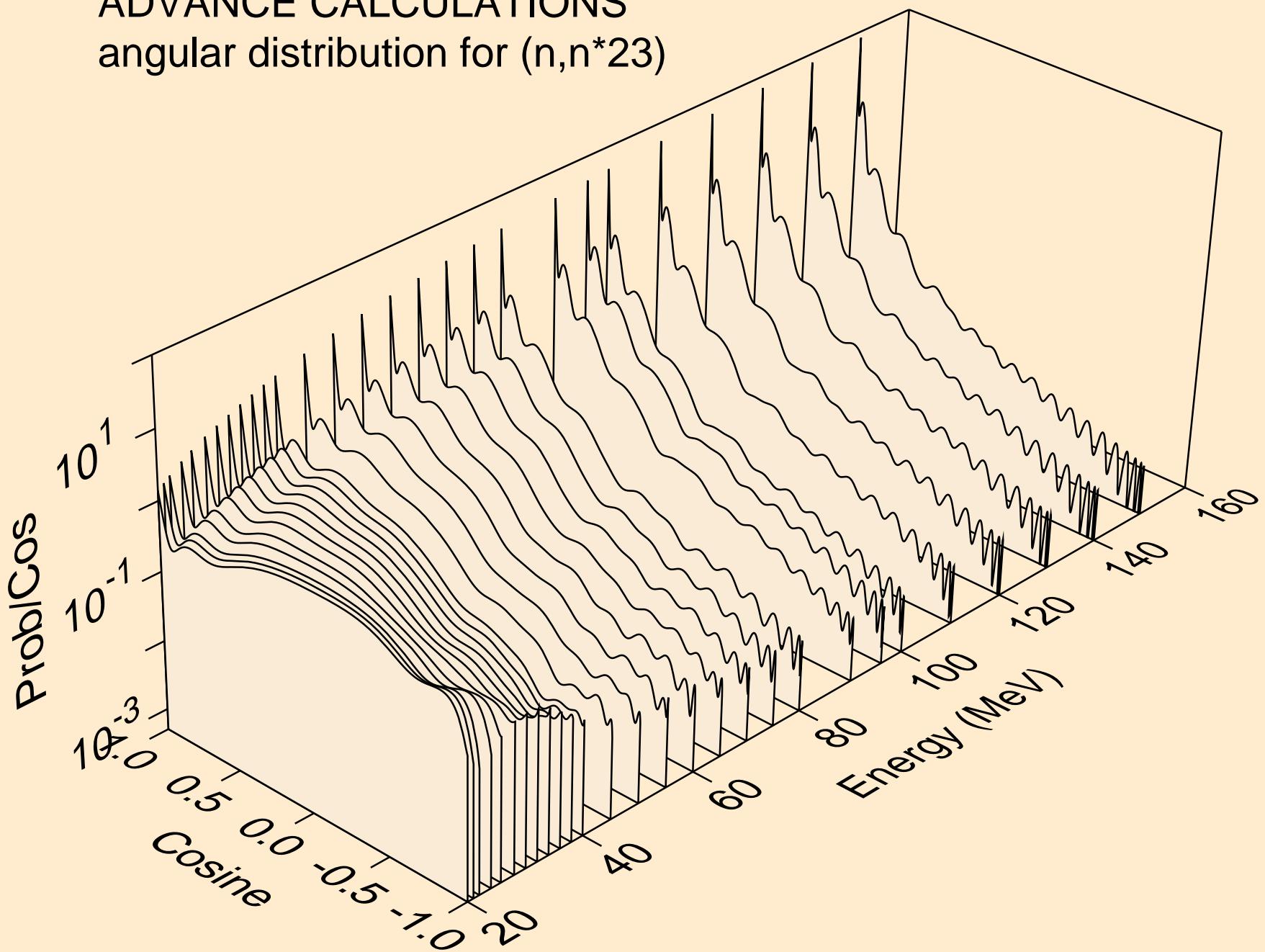
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*23)$



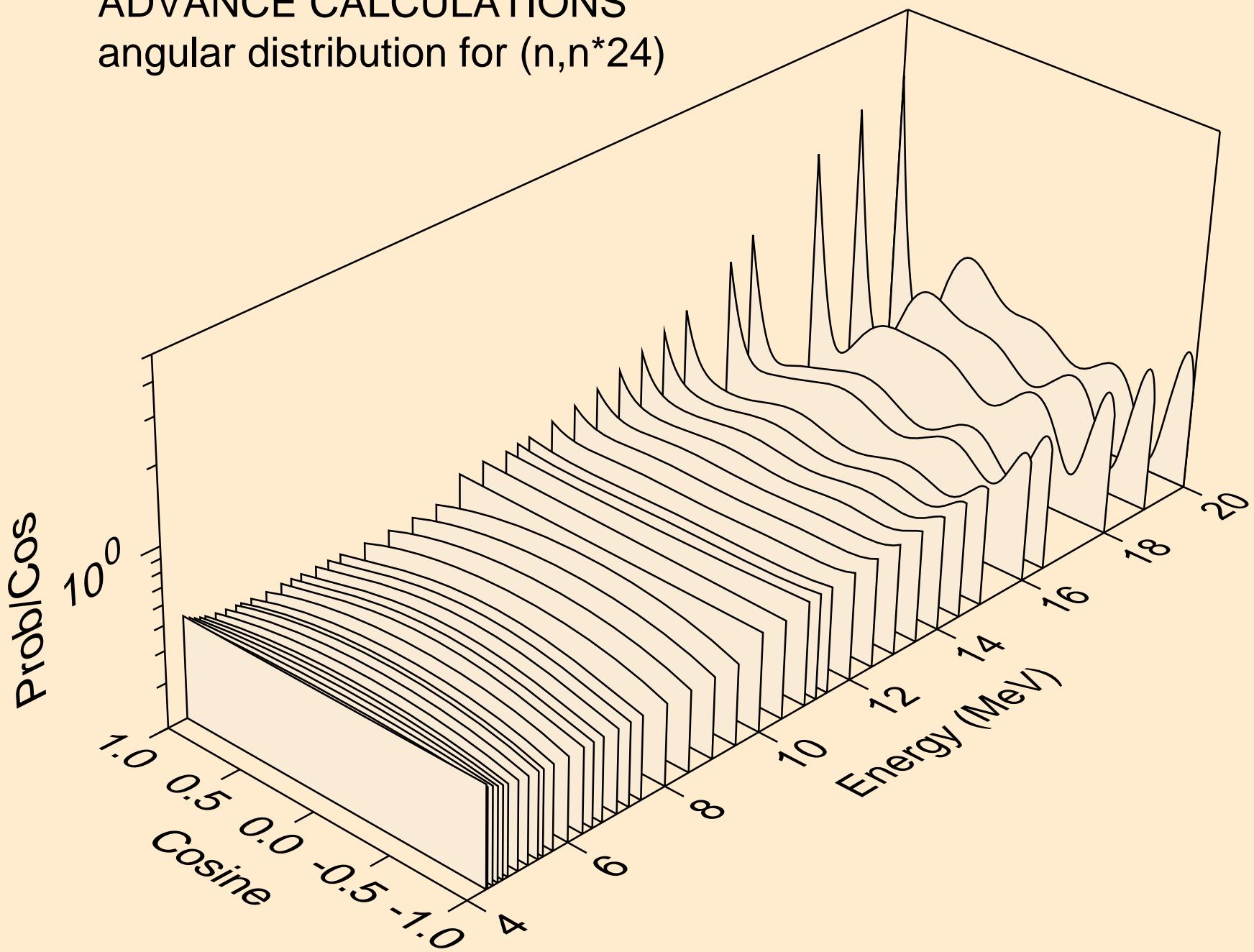
# ADVANCE CALCULATIONS

## angular distribution for ( $n, n^* 23$ )



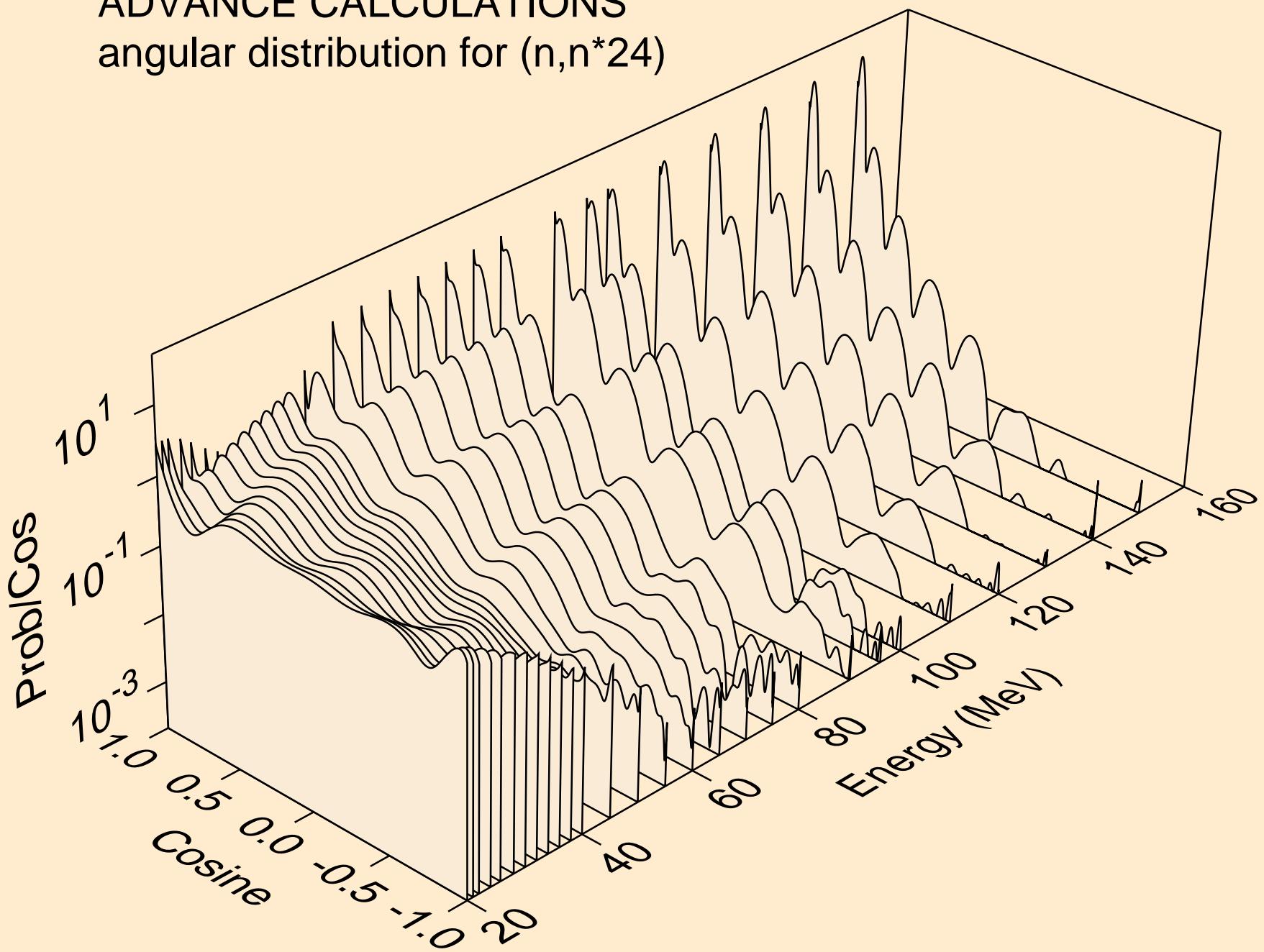
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^{24}$



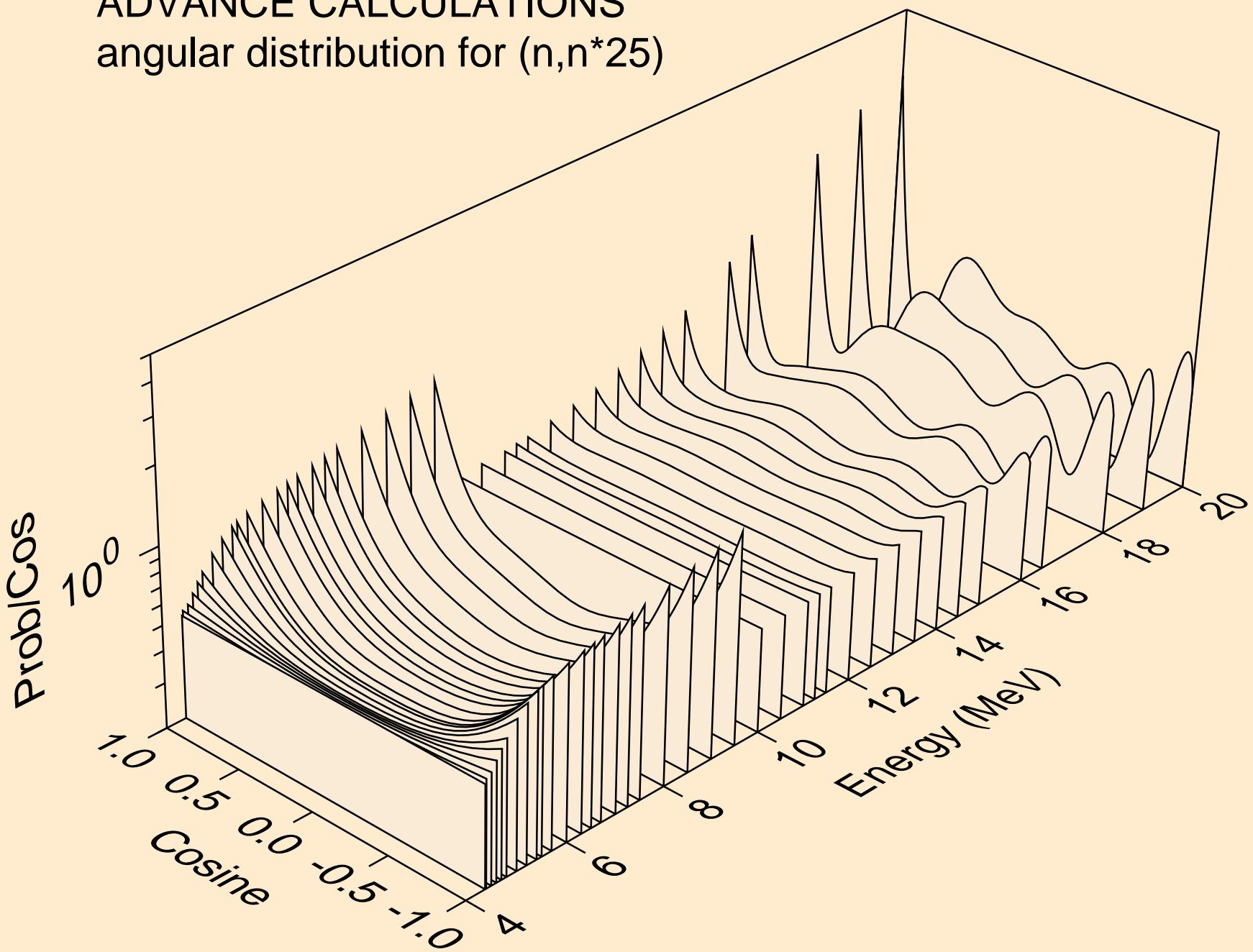
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*24)$



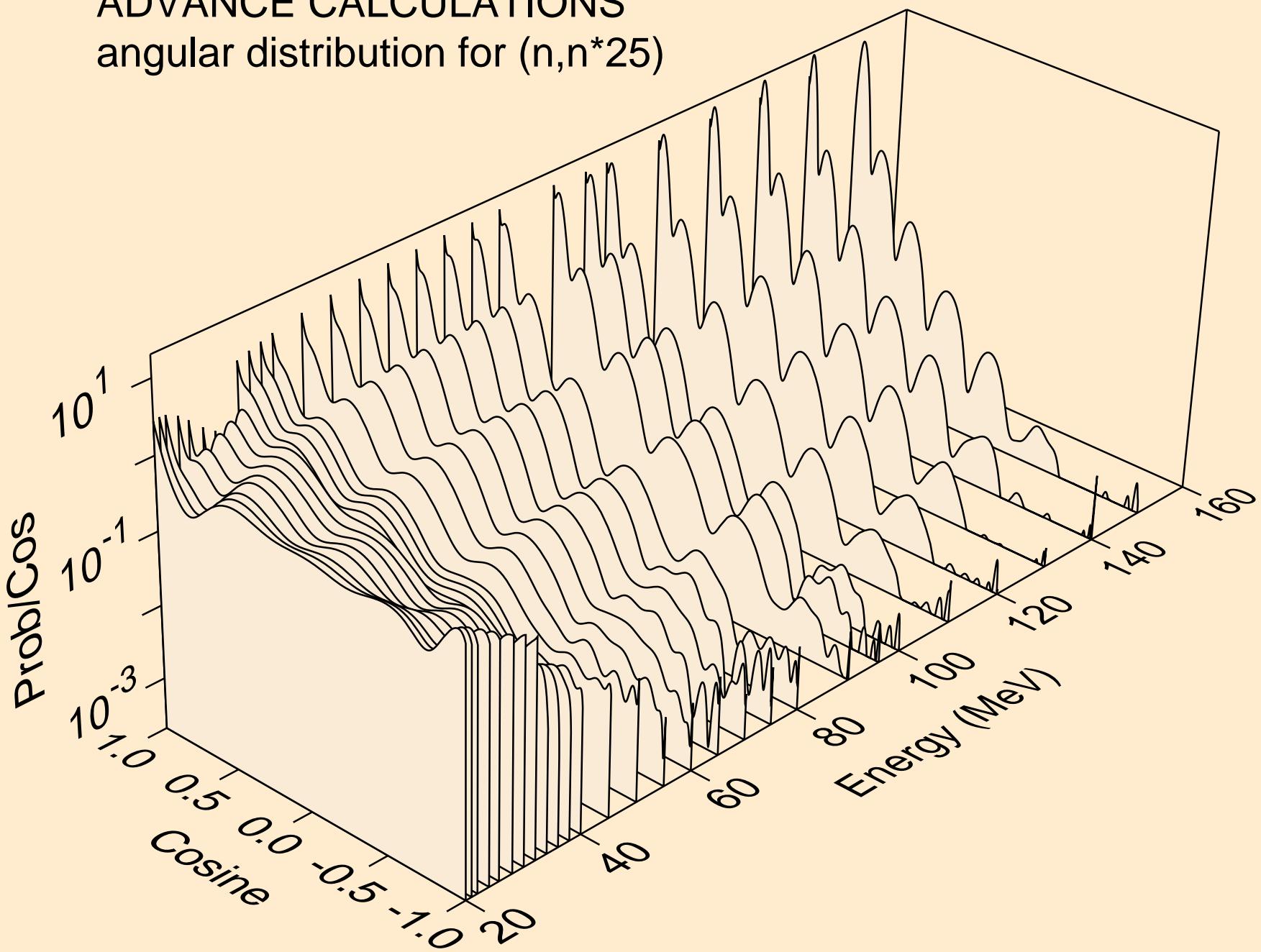
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^{25}$



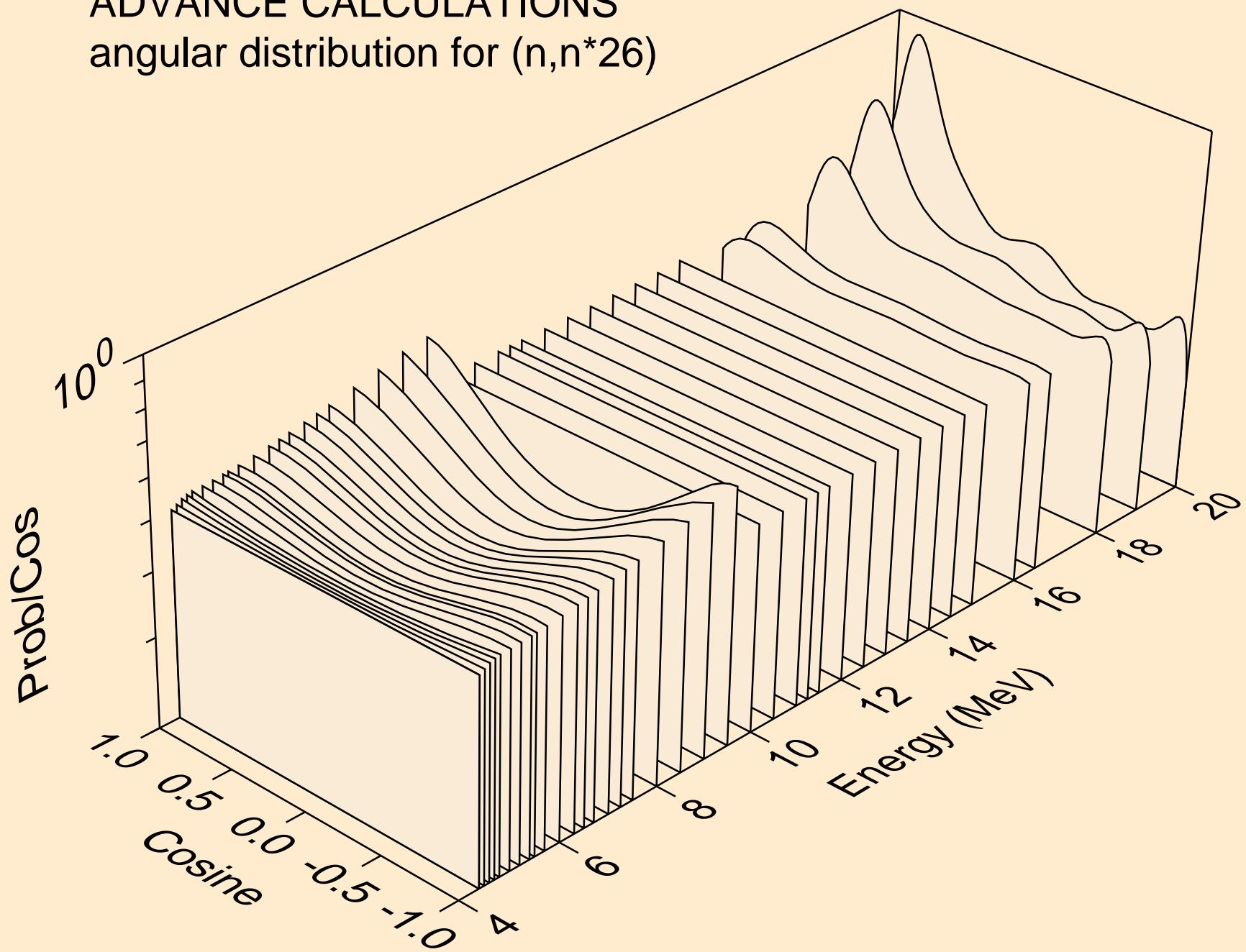
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^{25}$



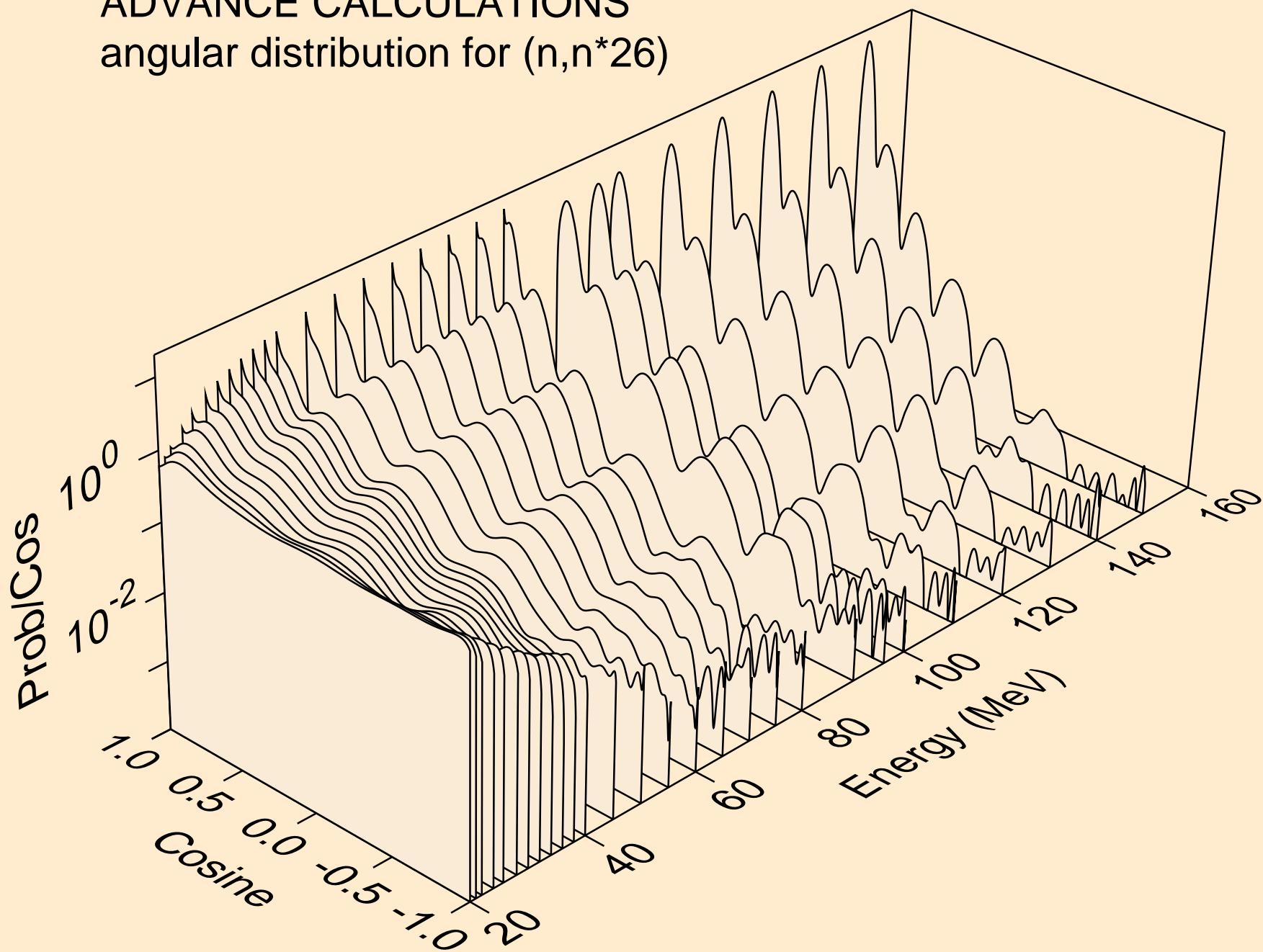
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)_{26}$



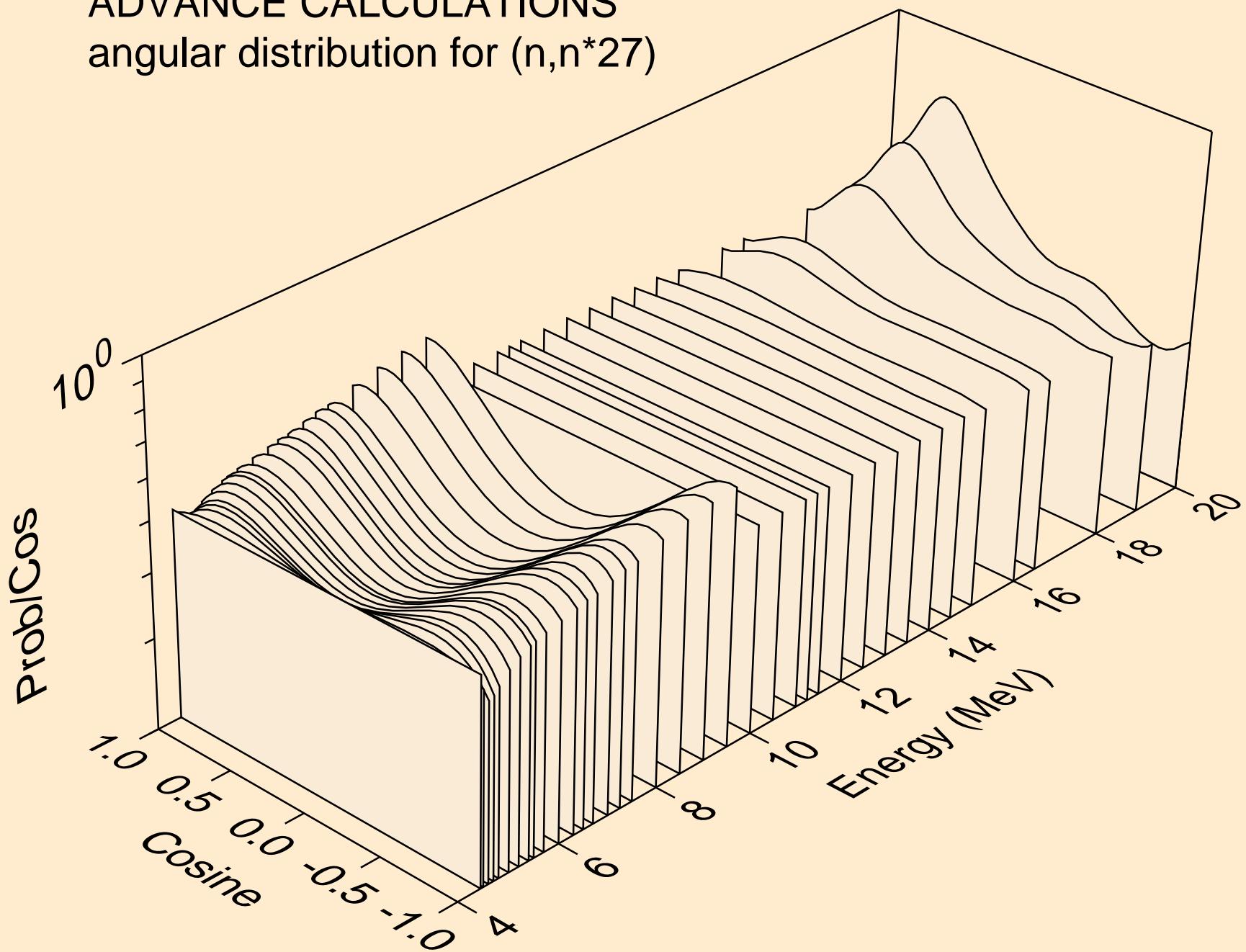
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*26)$



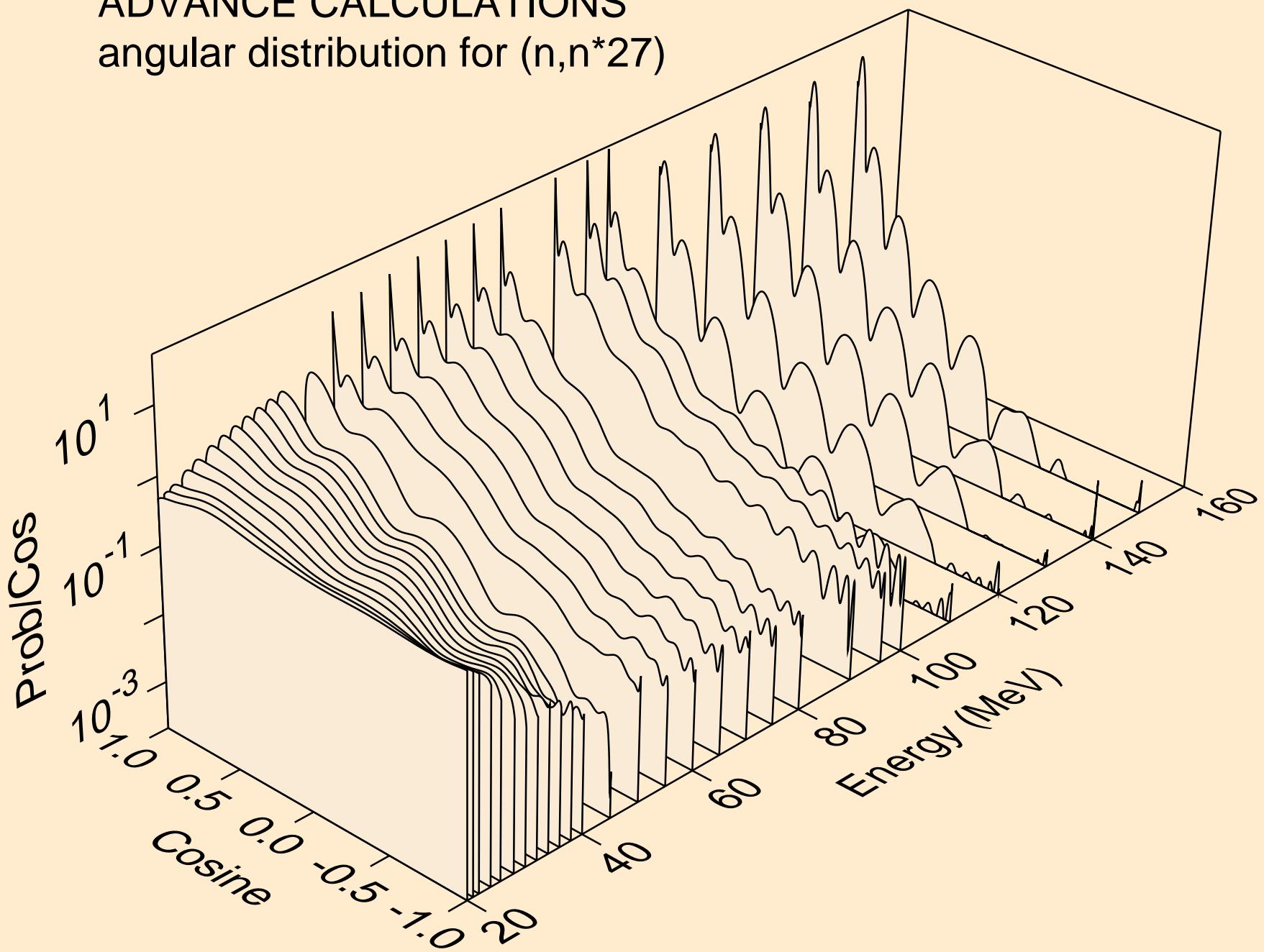
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*27)$



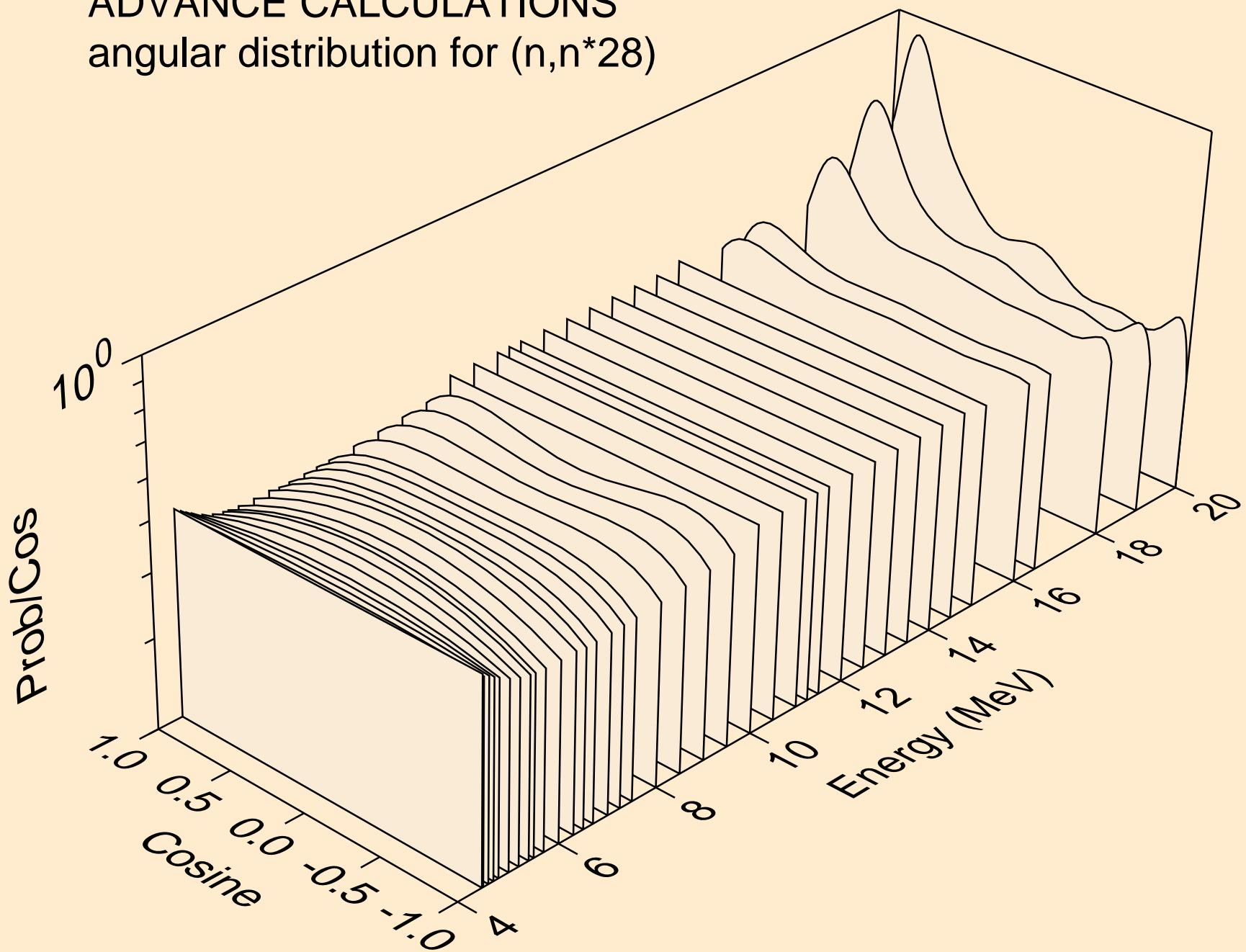
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^{27}$



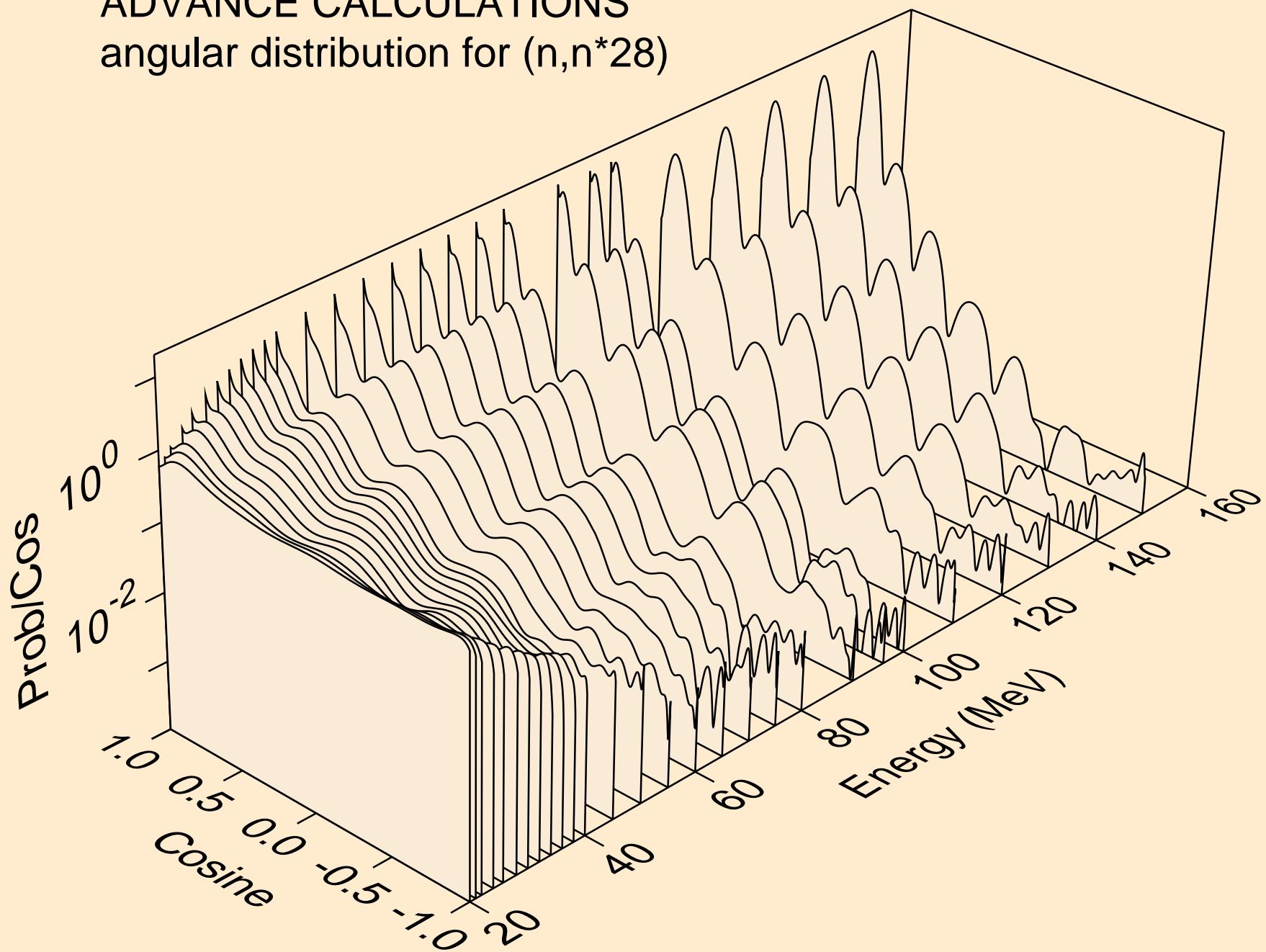
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^{28}$



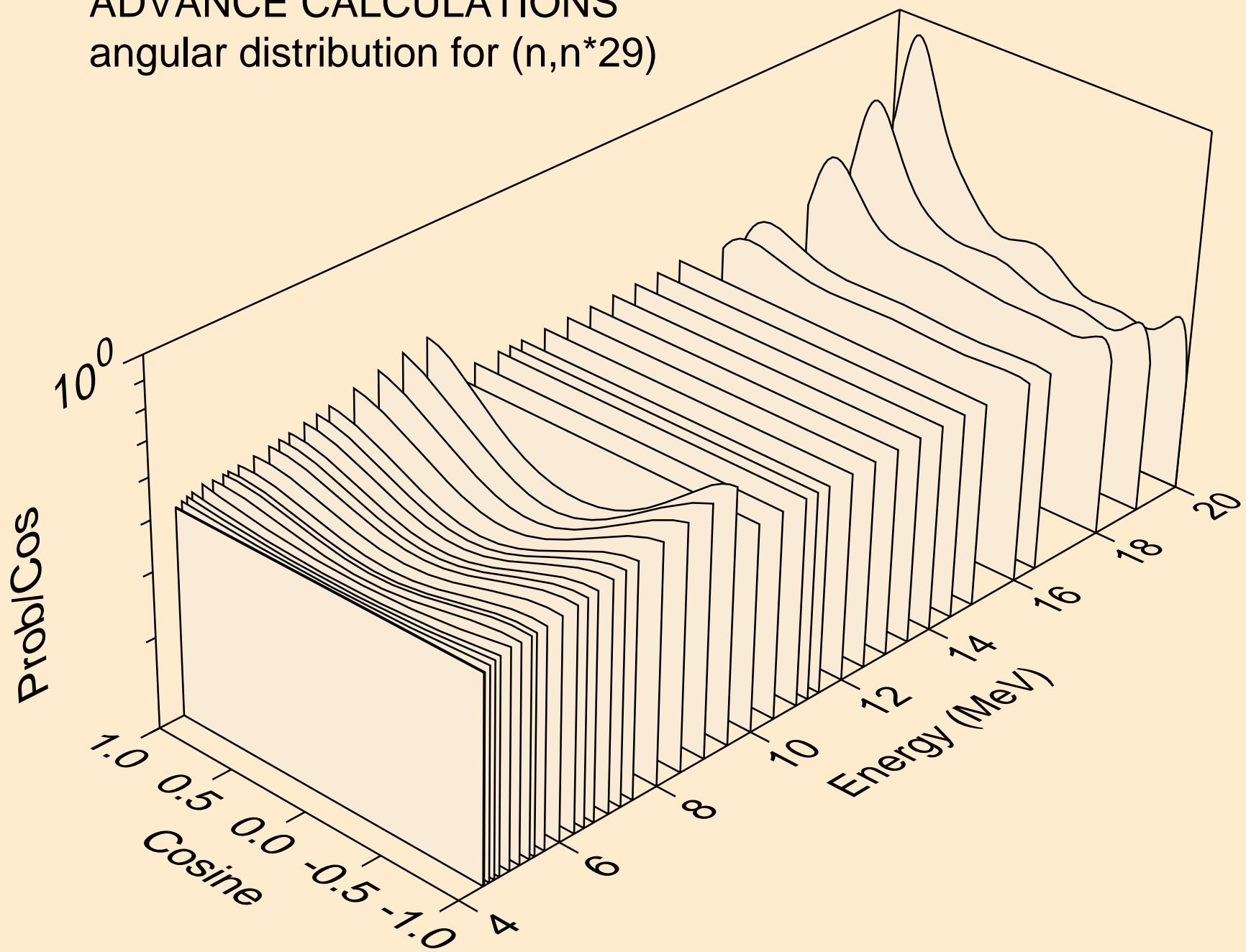
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^{28}$



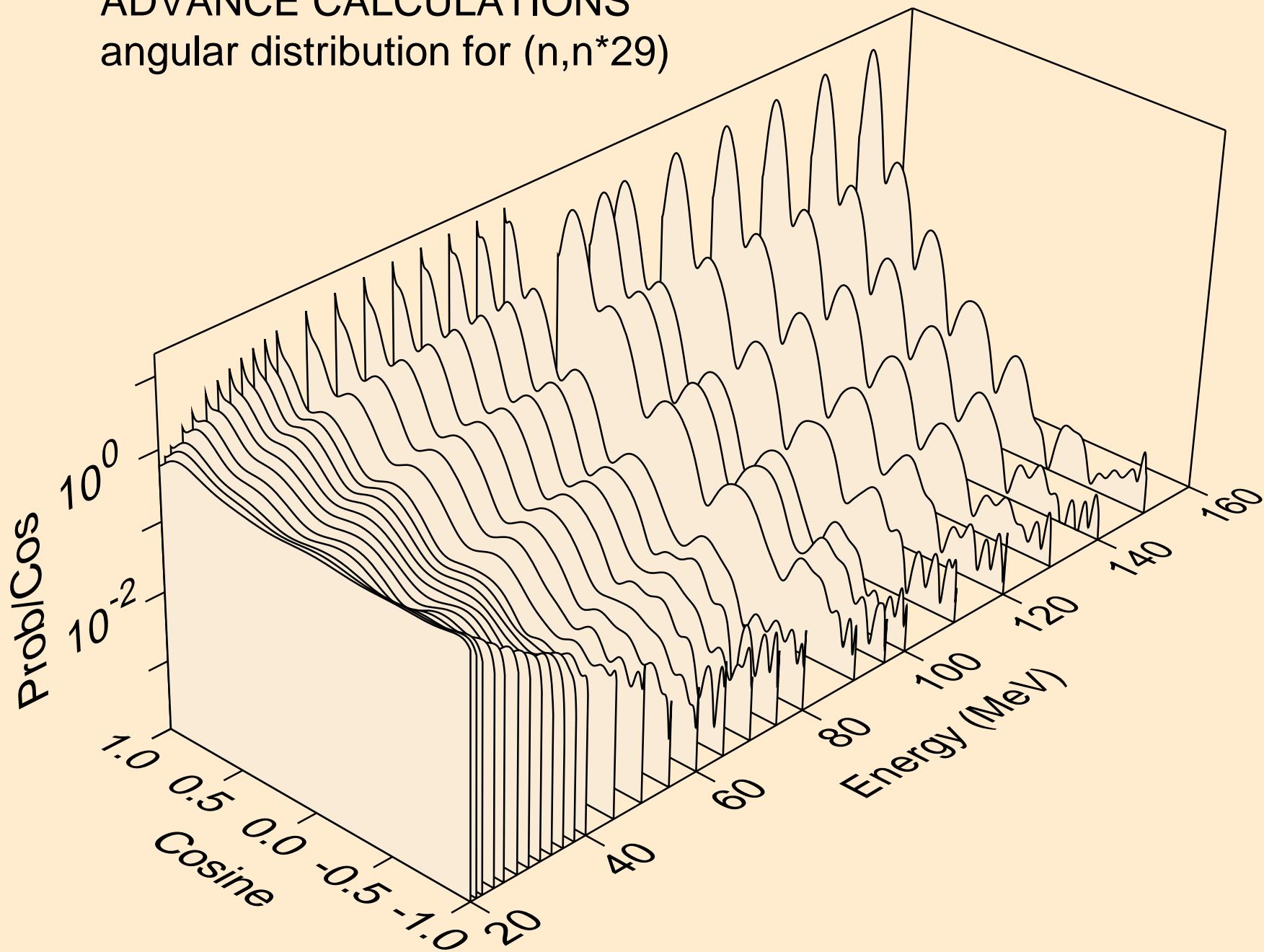
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*29)$



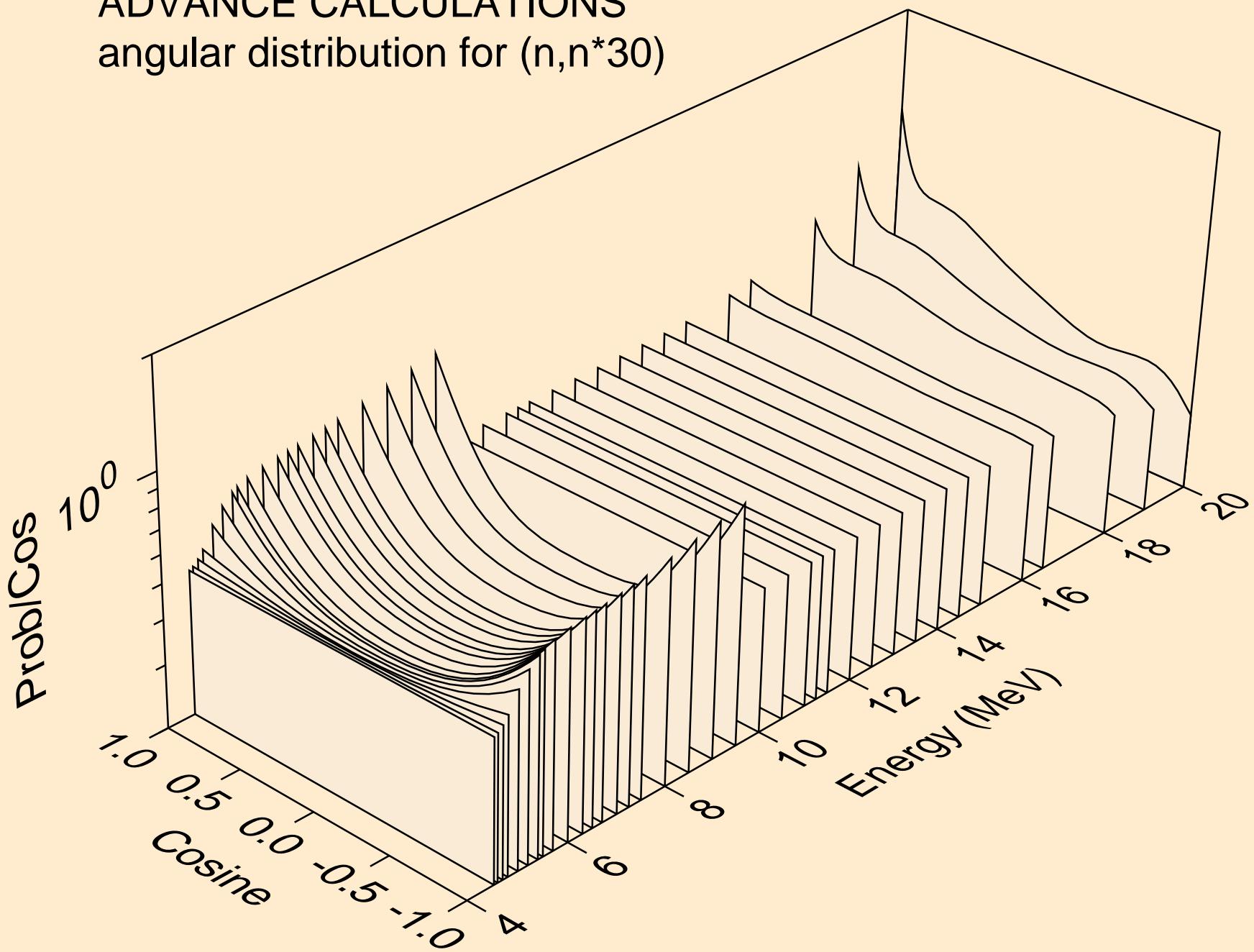
# ADVANCE CALCULATIONS

## angular distribution for ( $n, n^* 29$ )



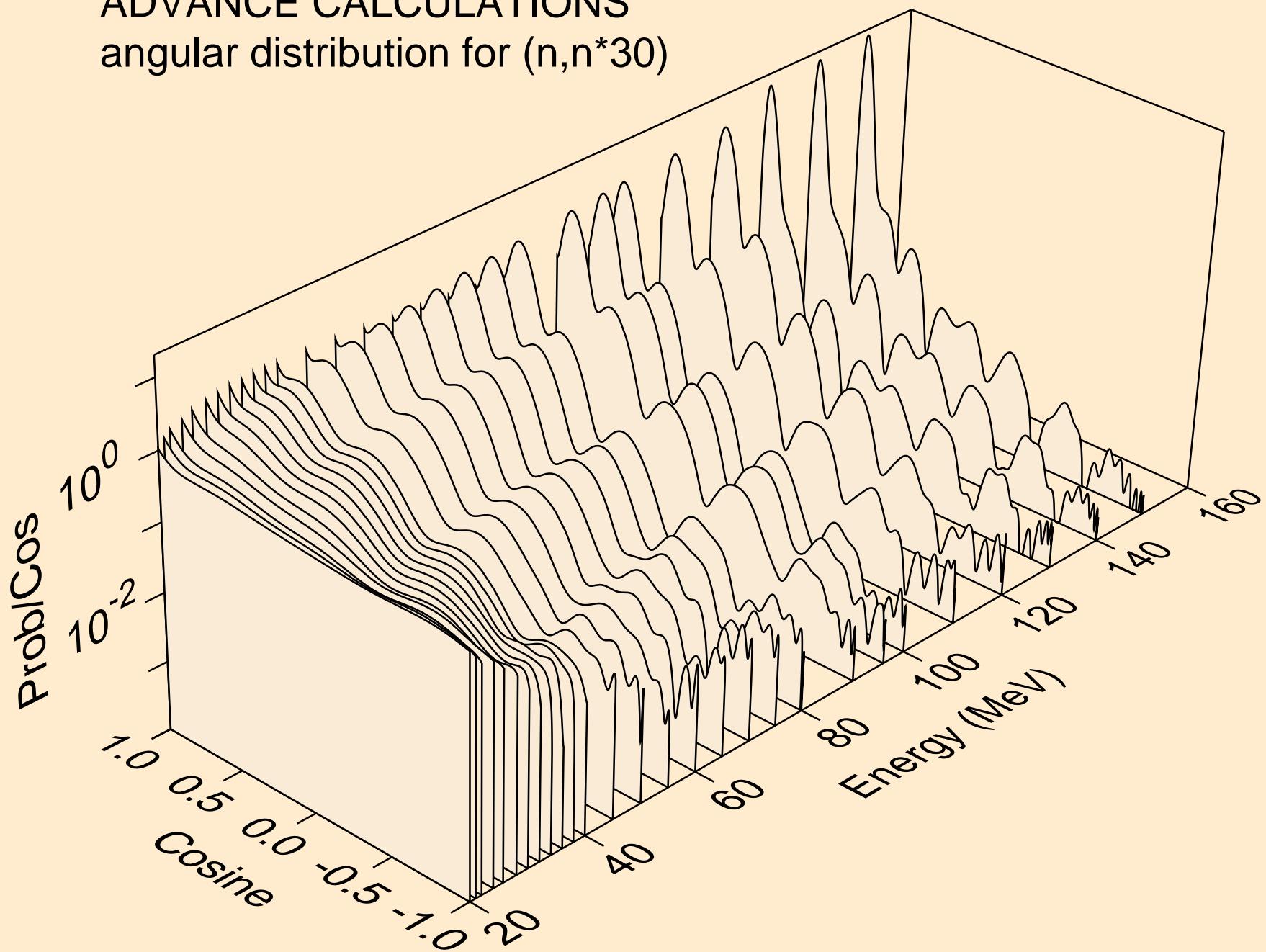
# ADVANCE CALCULATIONS

## angular distribution for $(n,n^*)30$



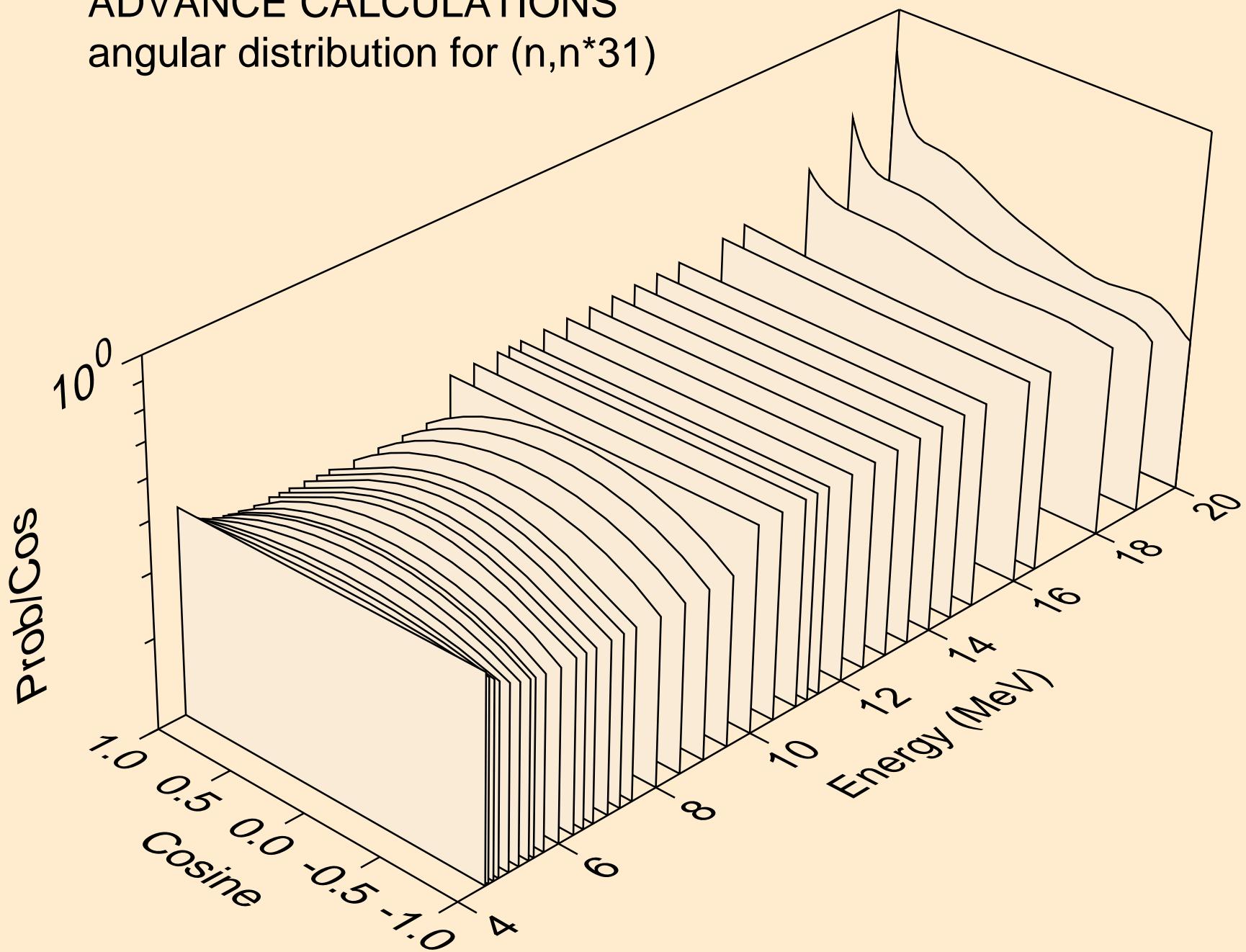
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)30$



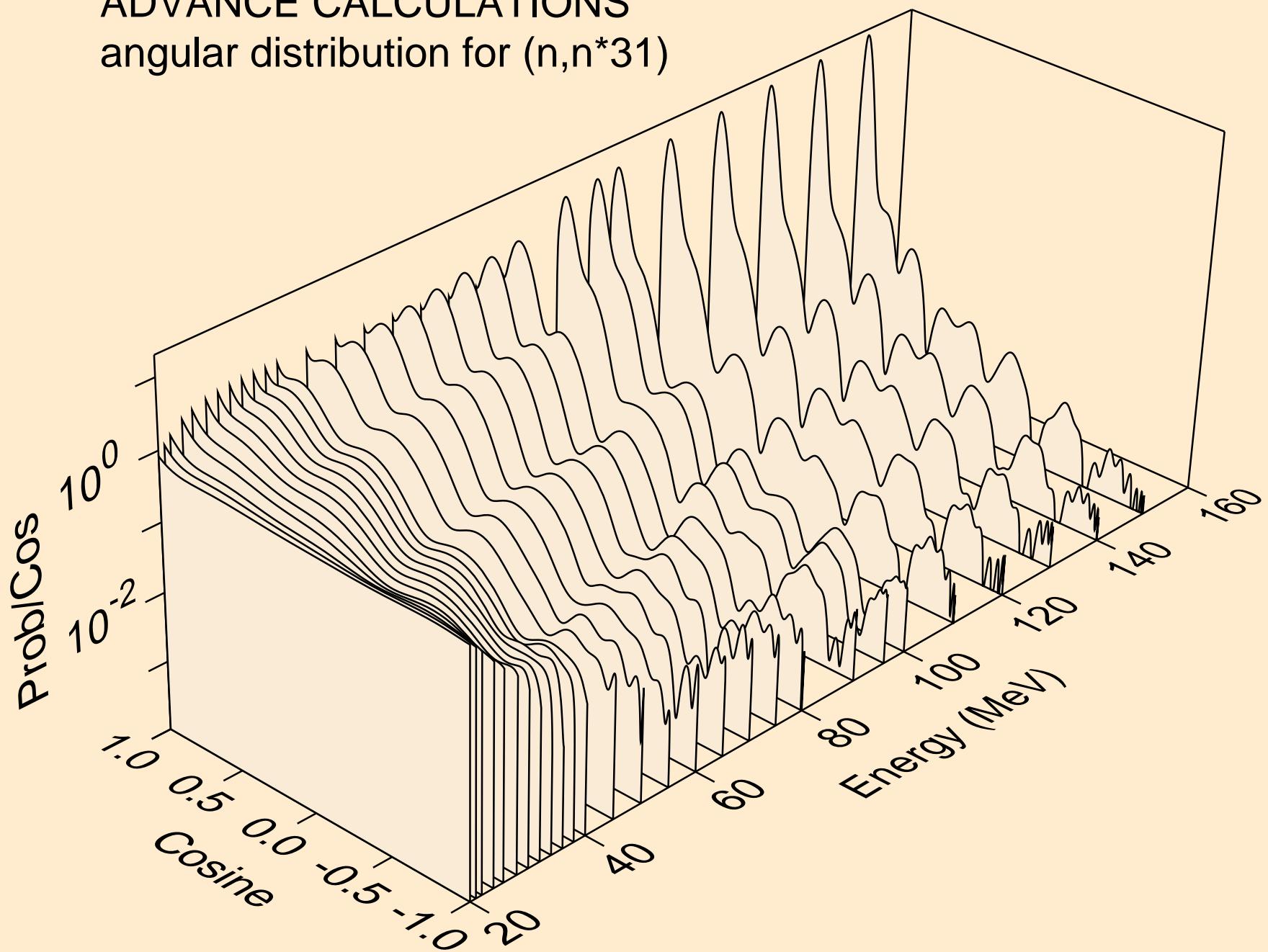
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*31)$



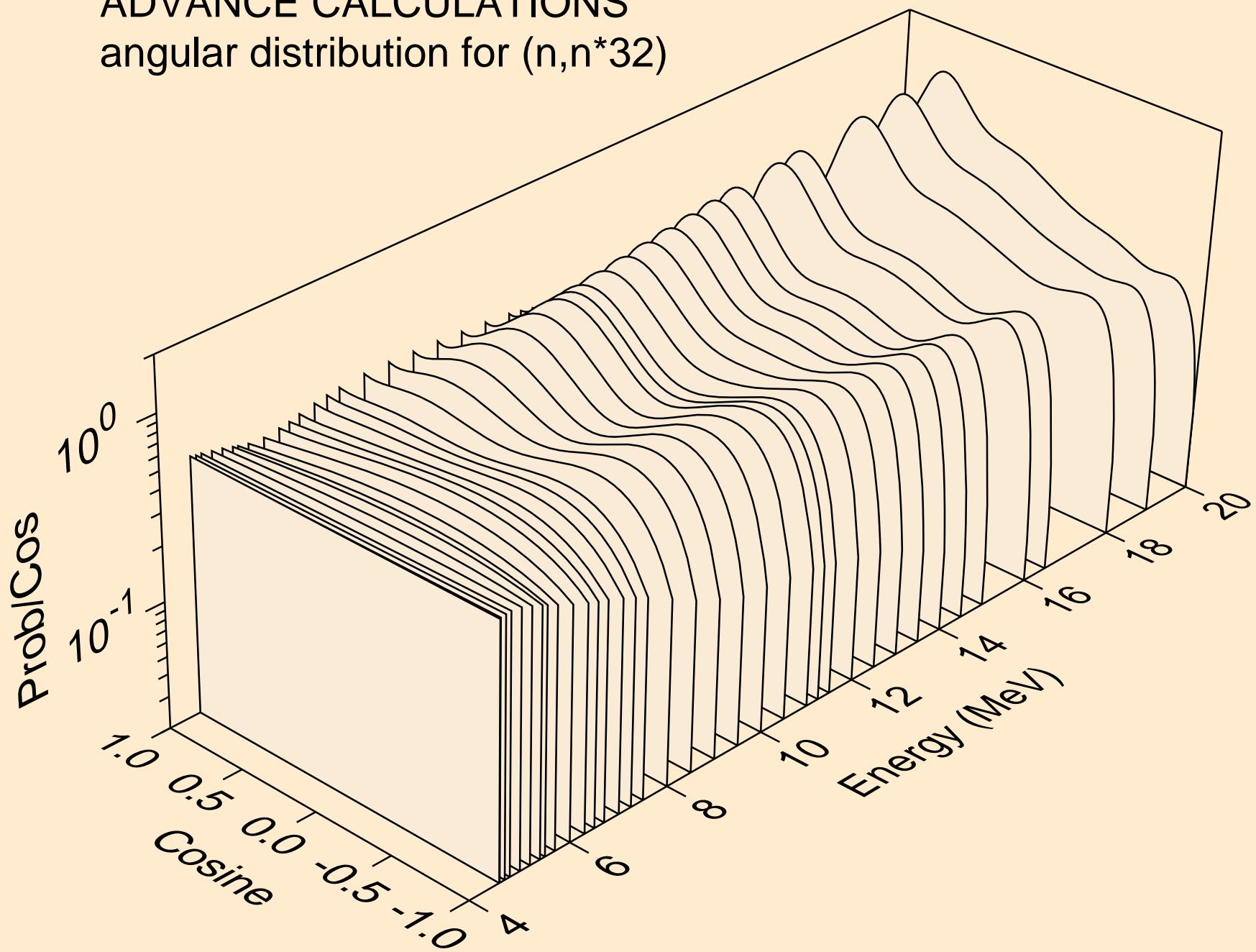
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*31)$



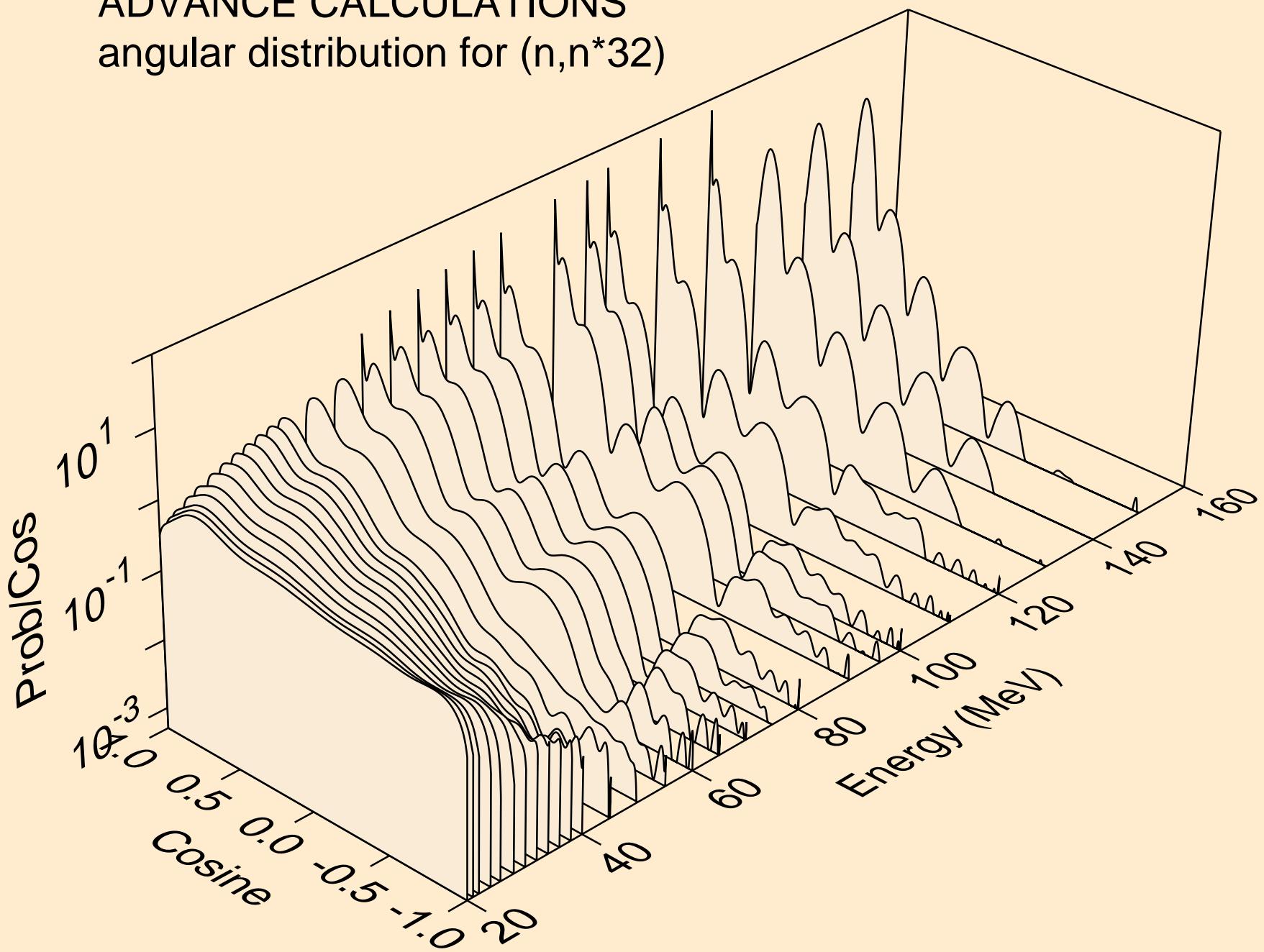
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*32)$



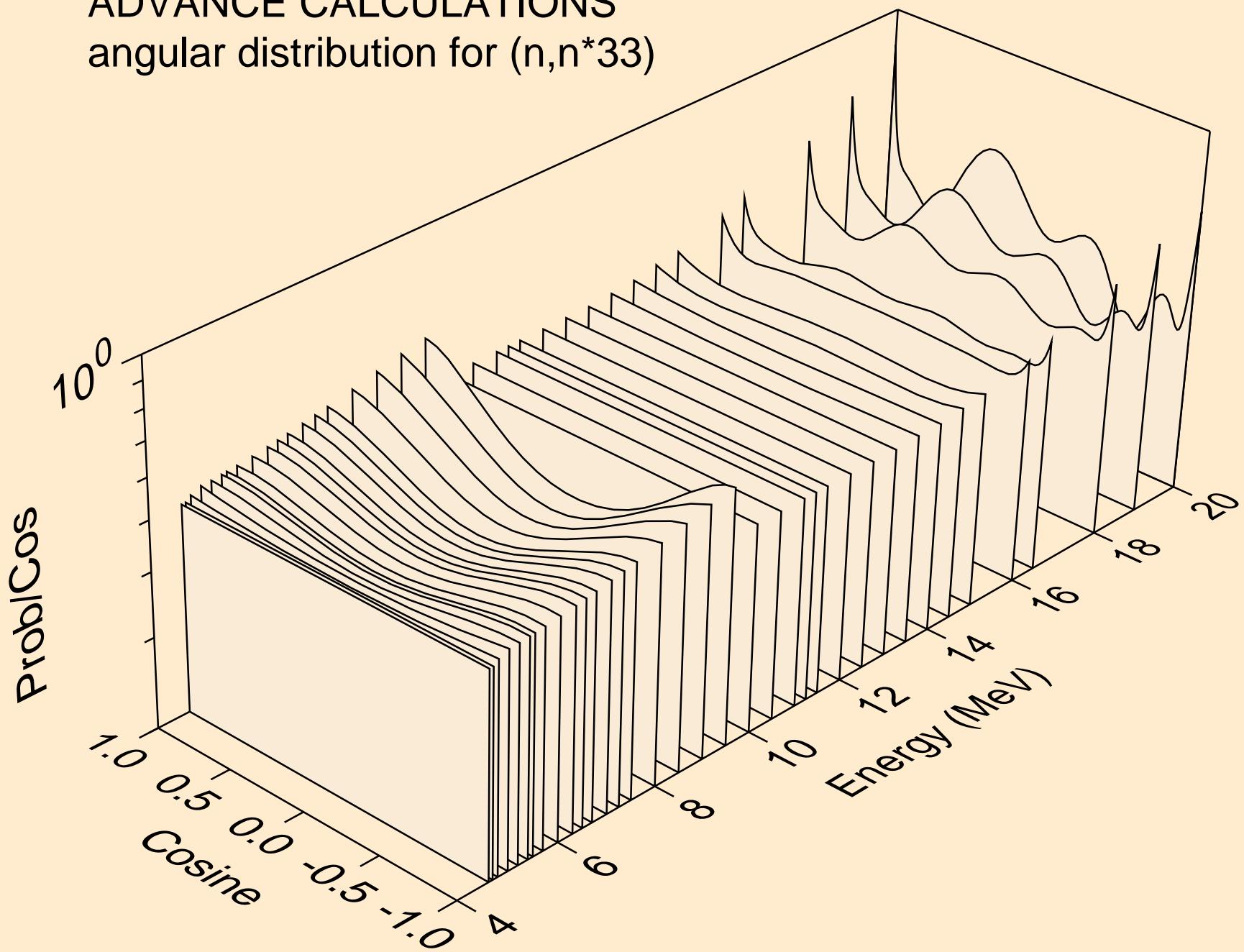
# ADVANCE CALCULATIONS

## angular distribution for $(n,n^*32)$



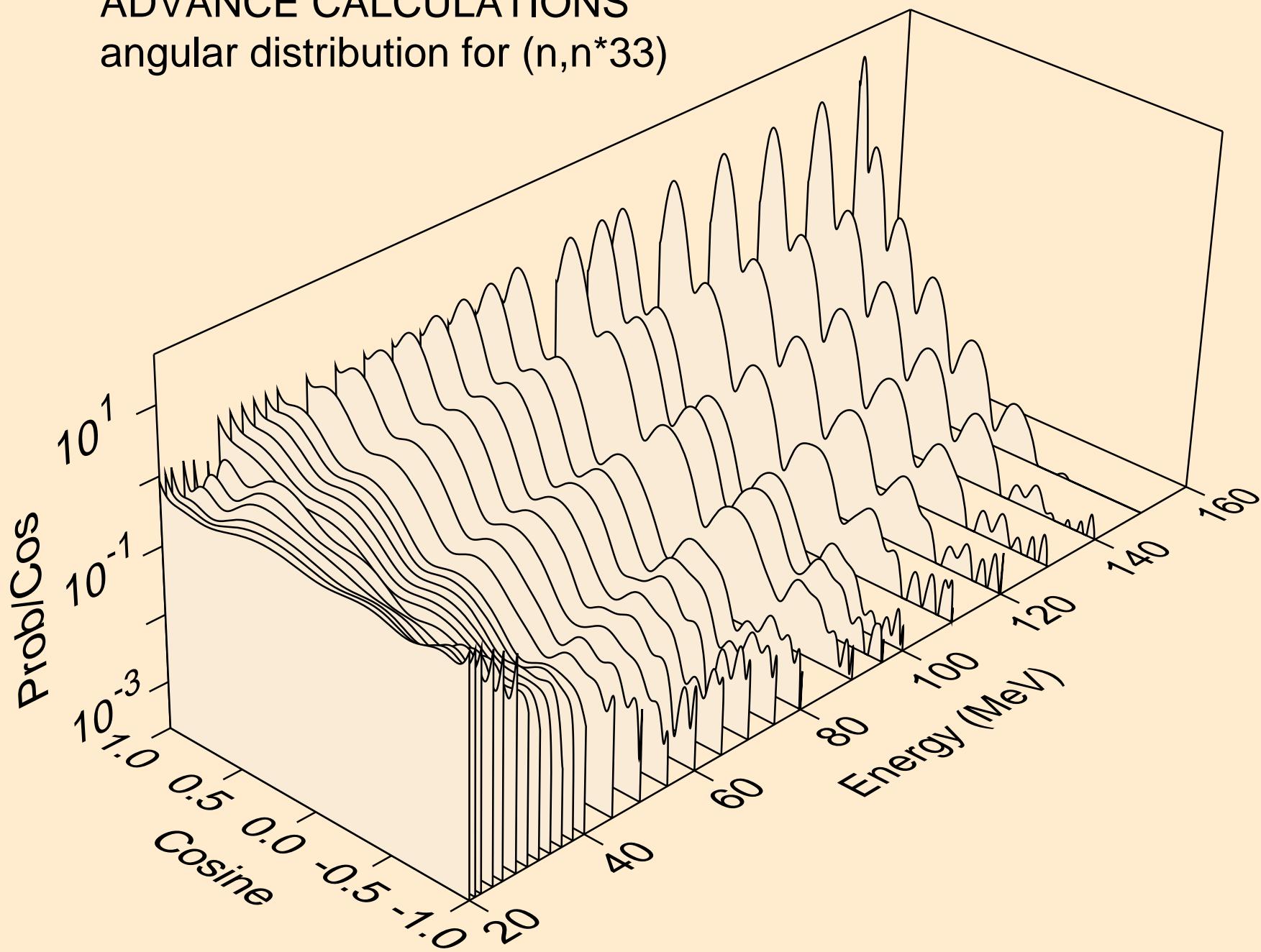
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*33)$



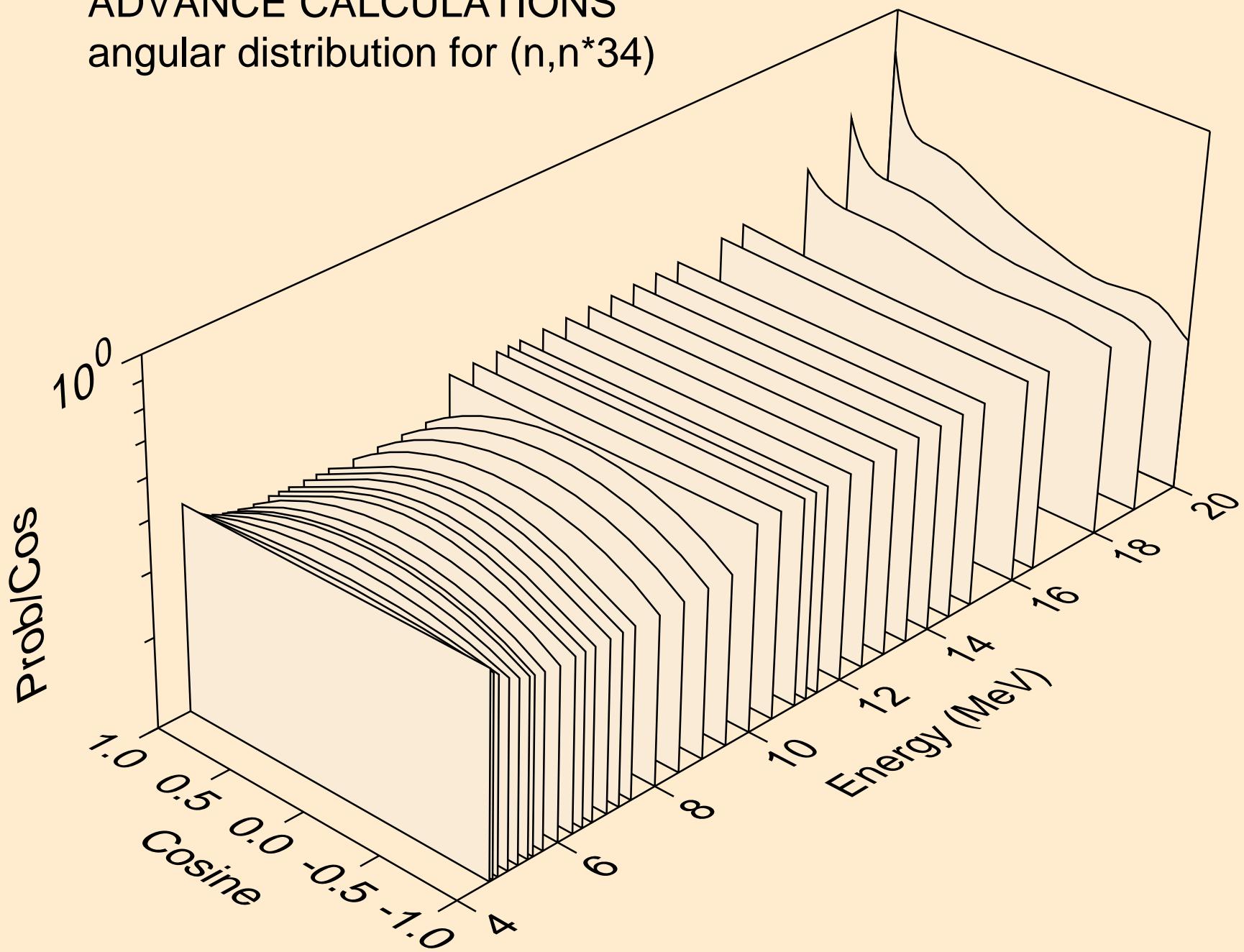
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*33)$



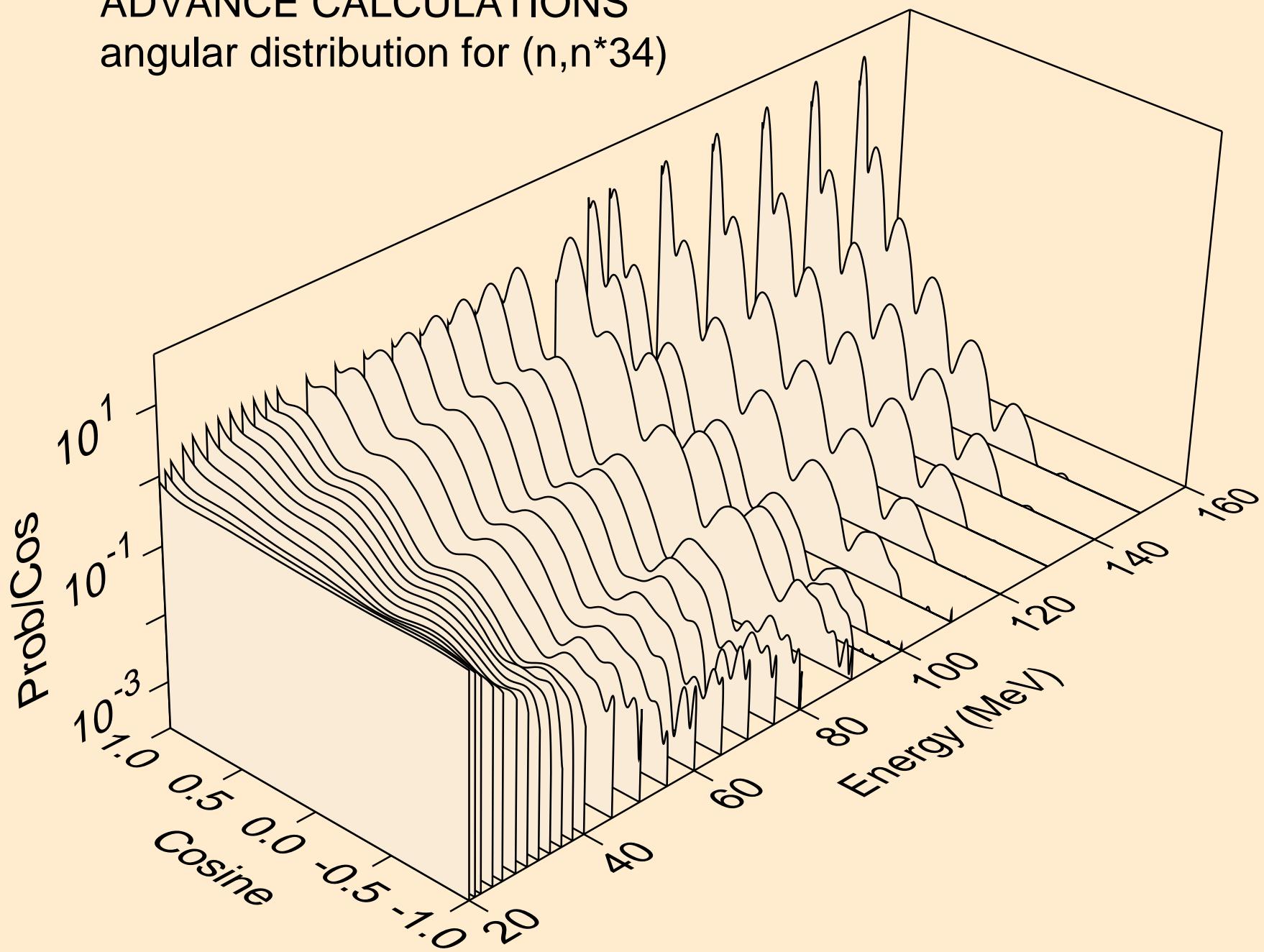
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*34)$



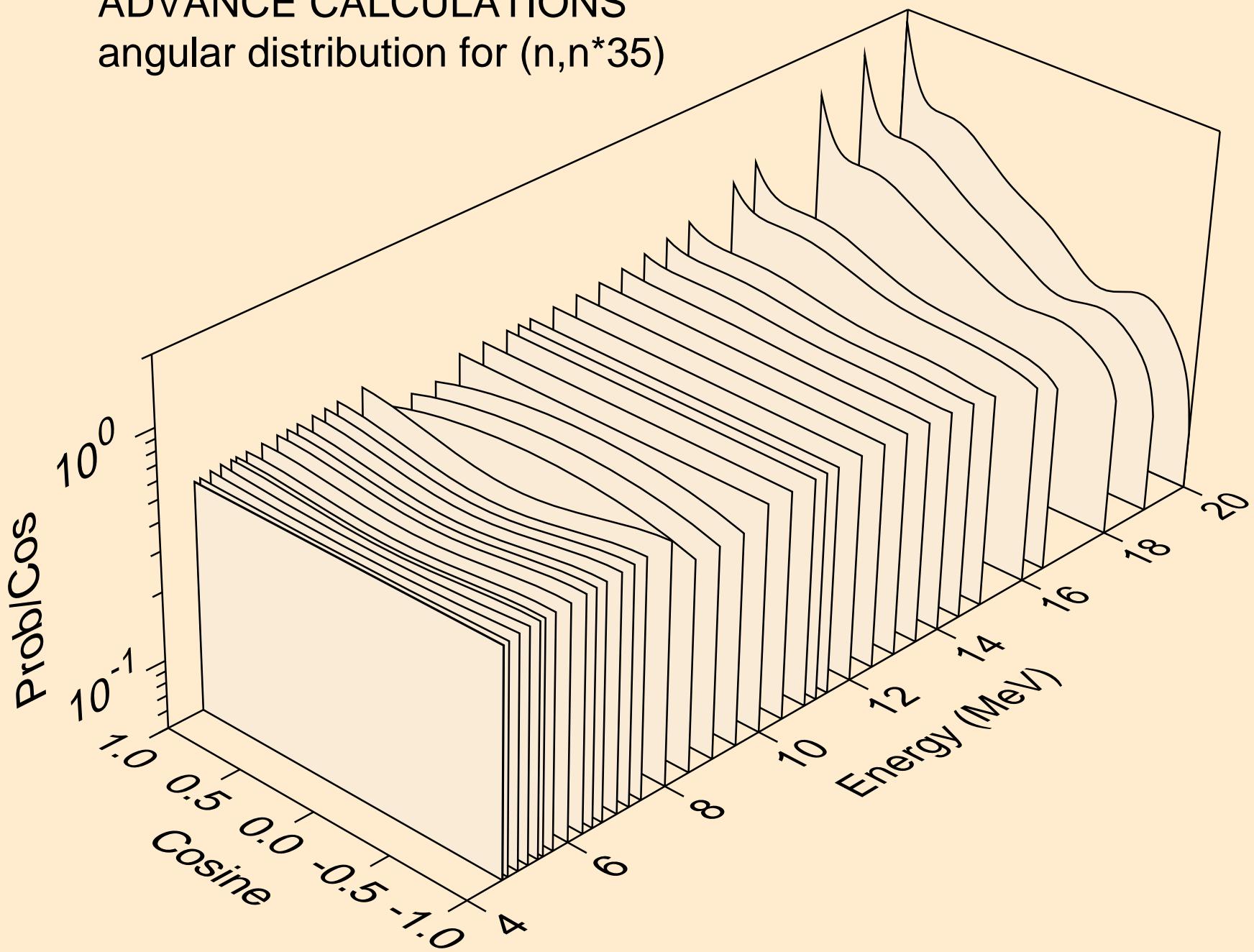
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*34)$



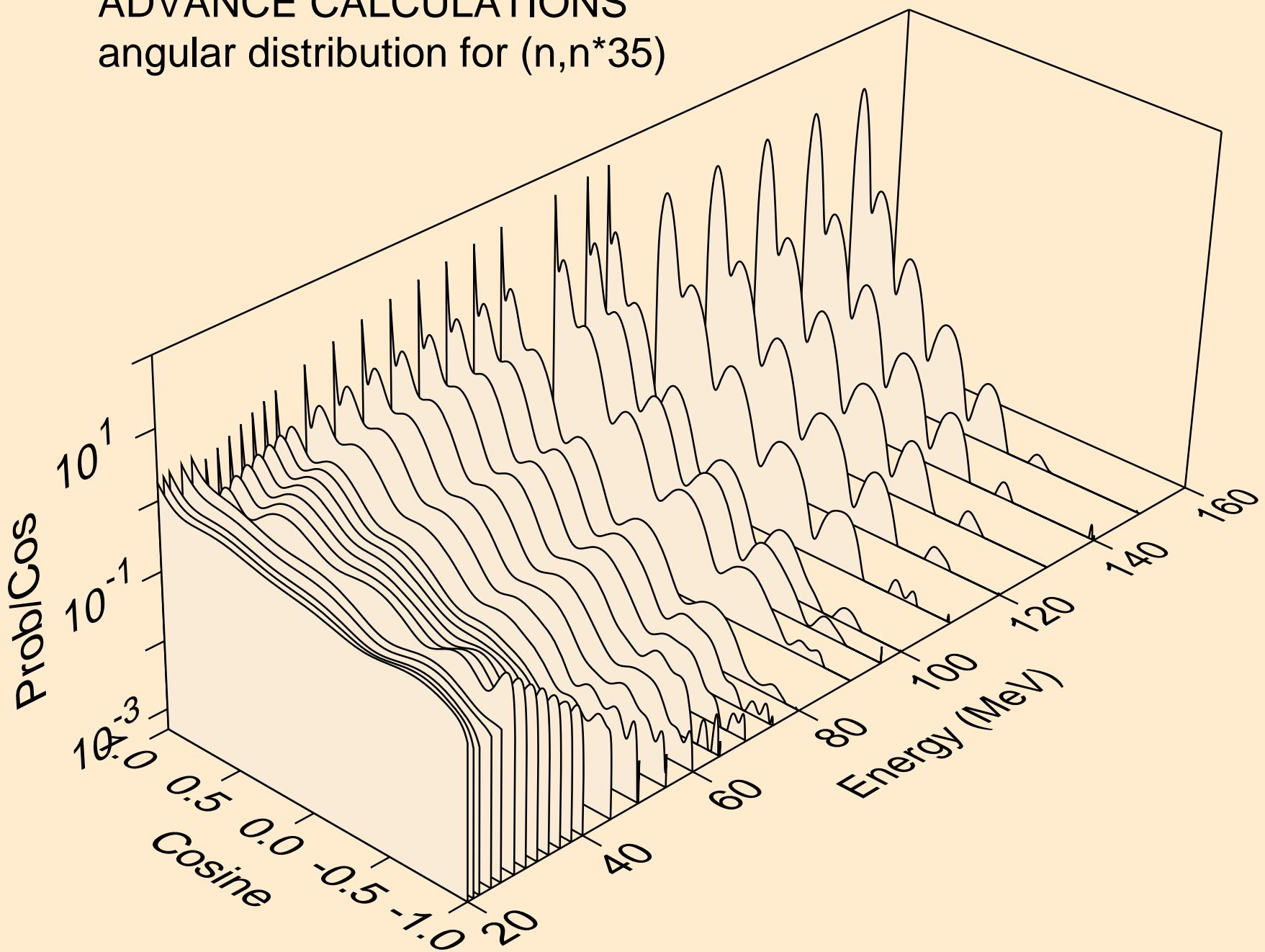
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*35)$



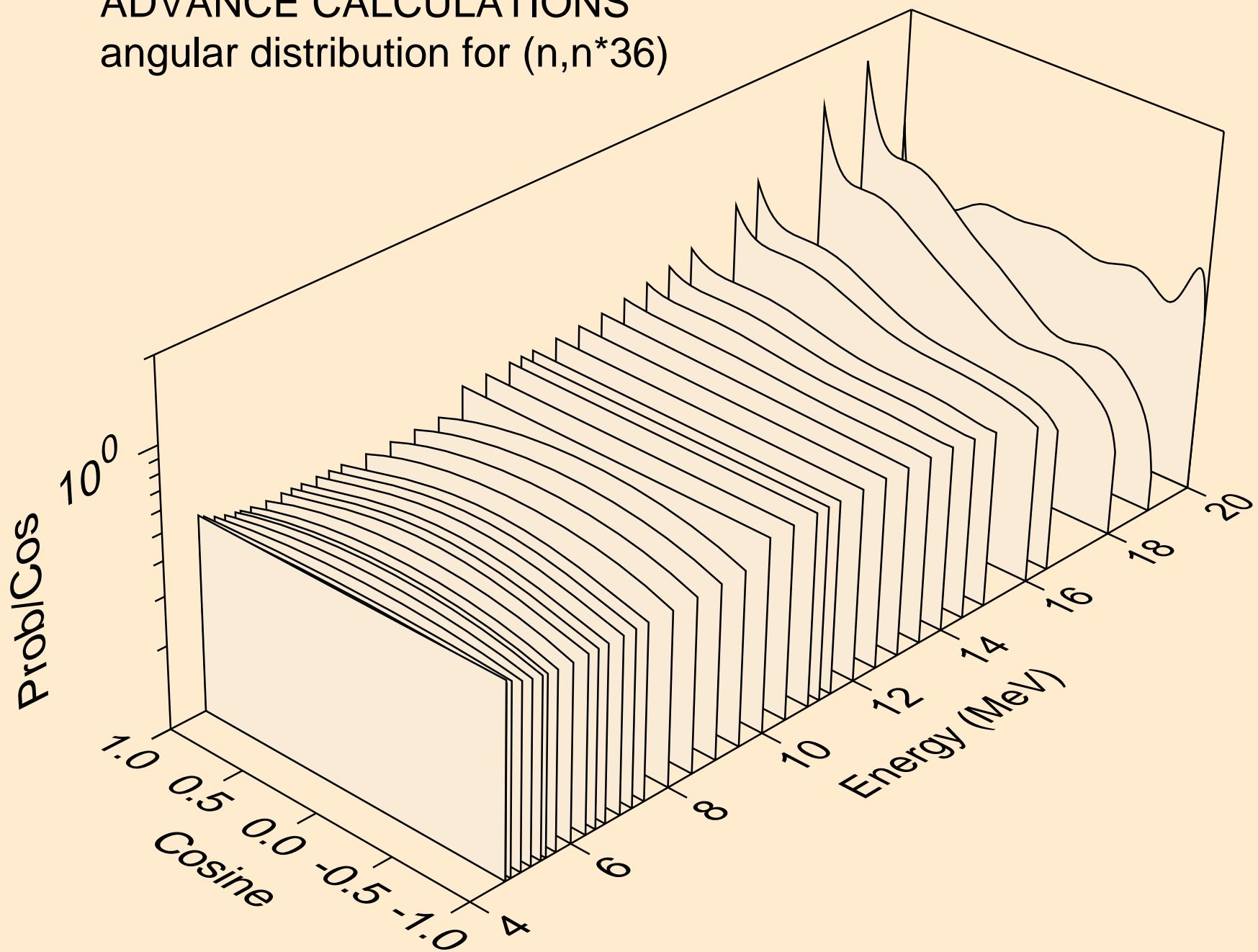
# ADVANCE CALCULATIONS

## angular distribution for ( $n, n^*35$ )



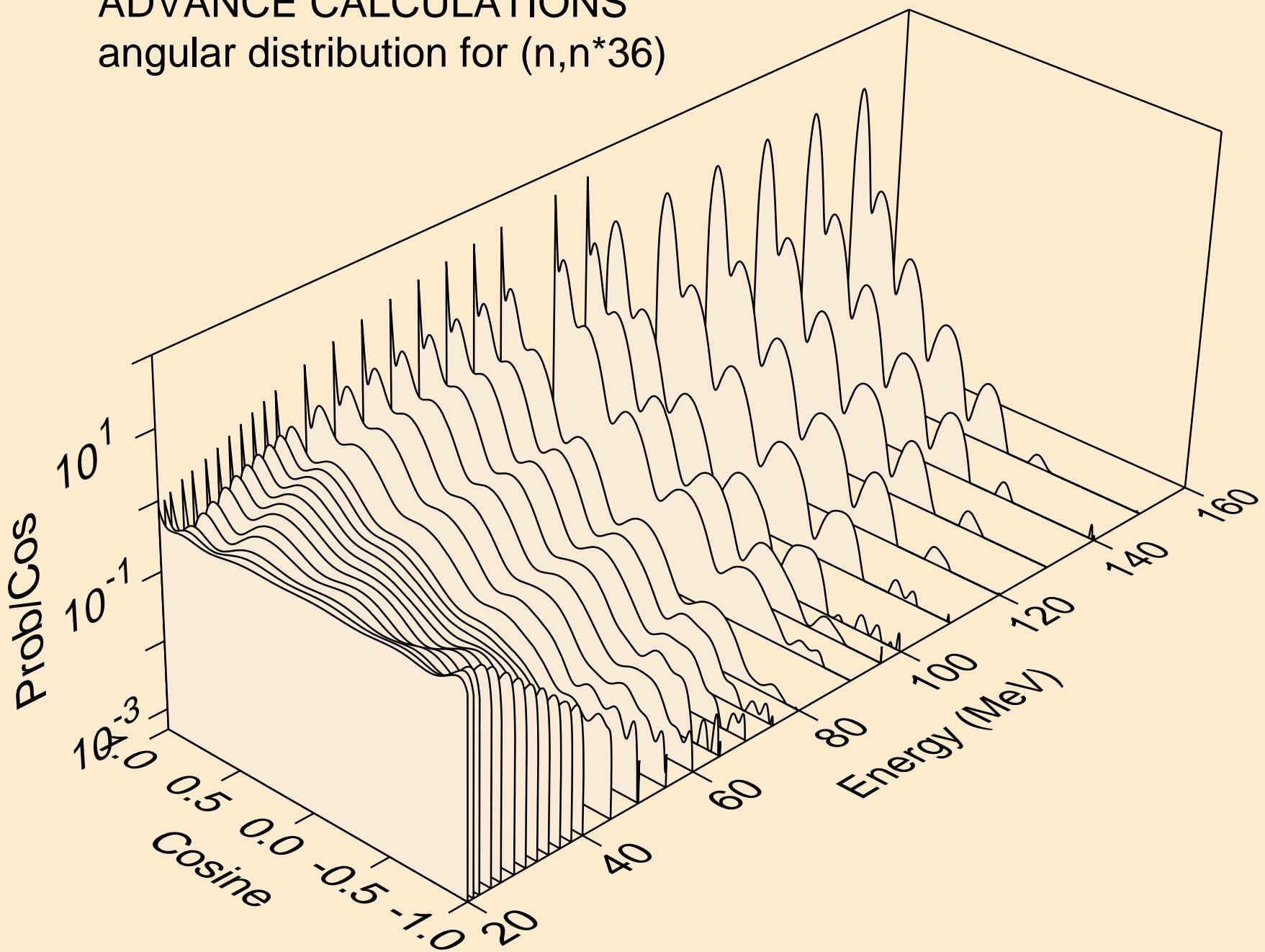
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*36)$



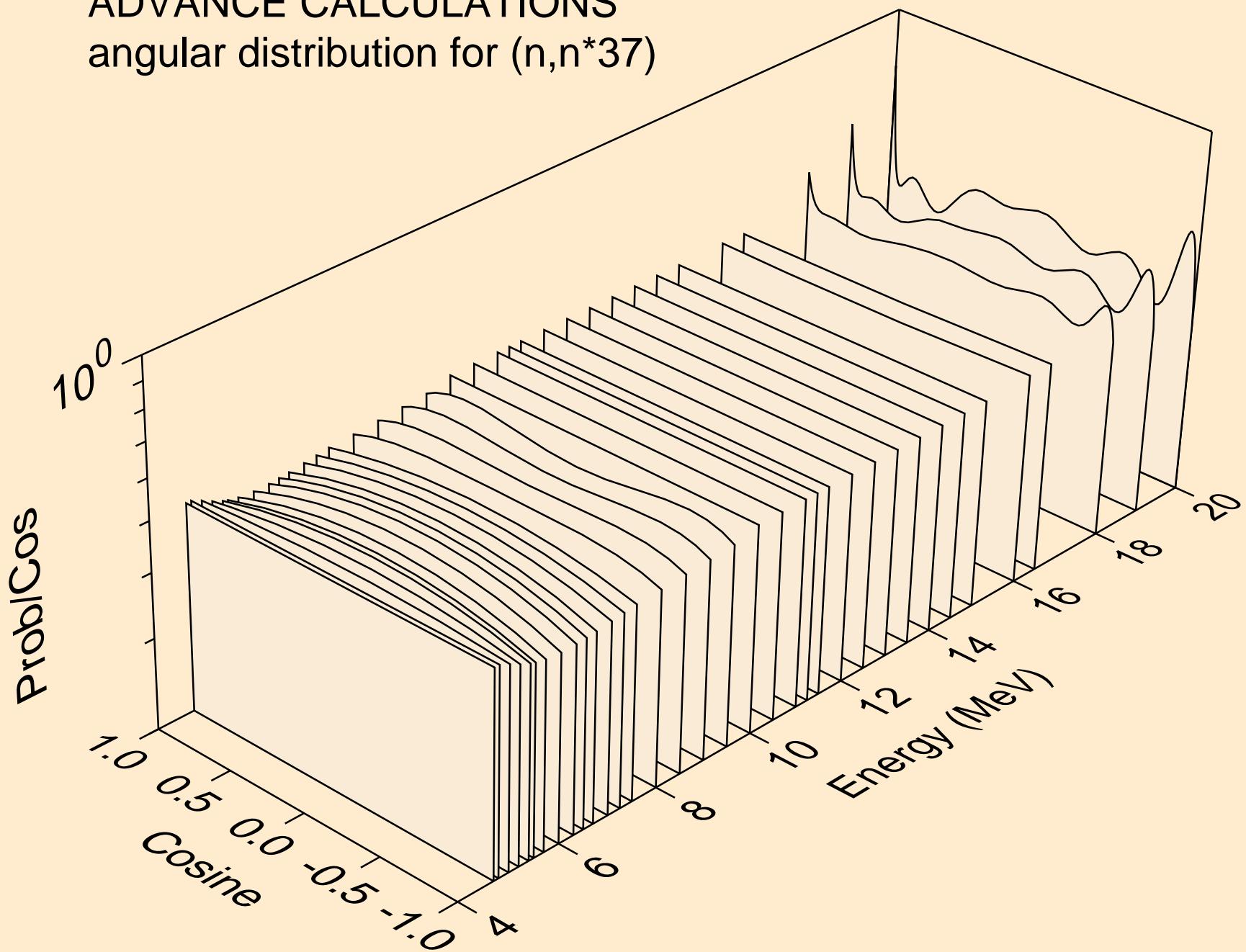
# ADVANCE CALCULATIONS

## angular distribution for $(n,n^*36)$



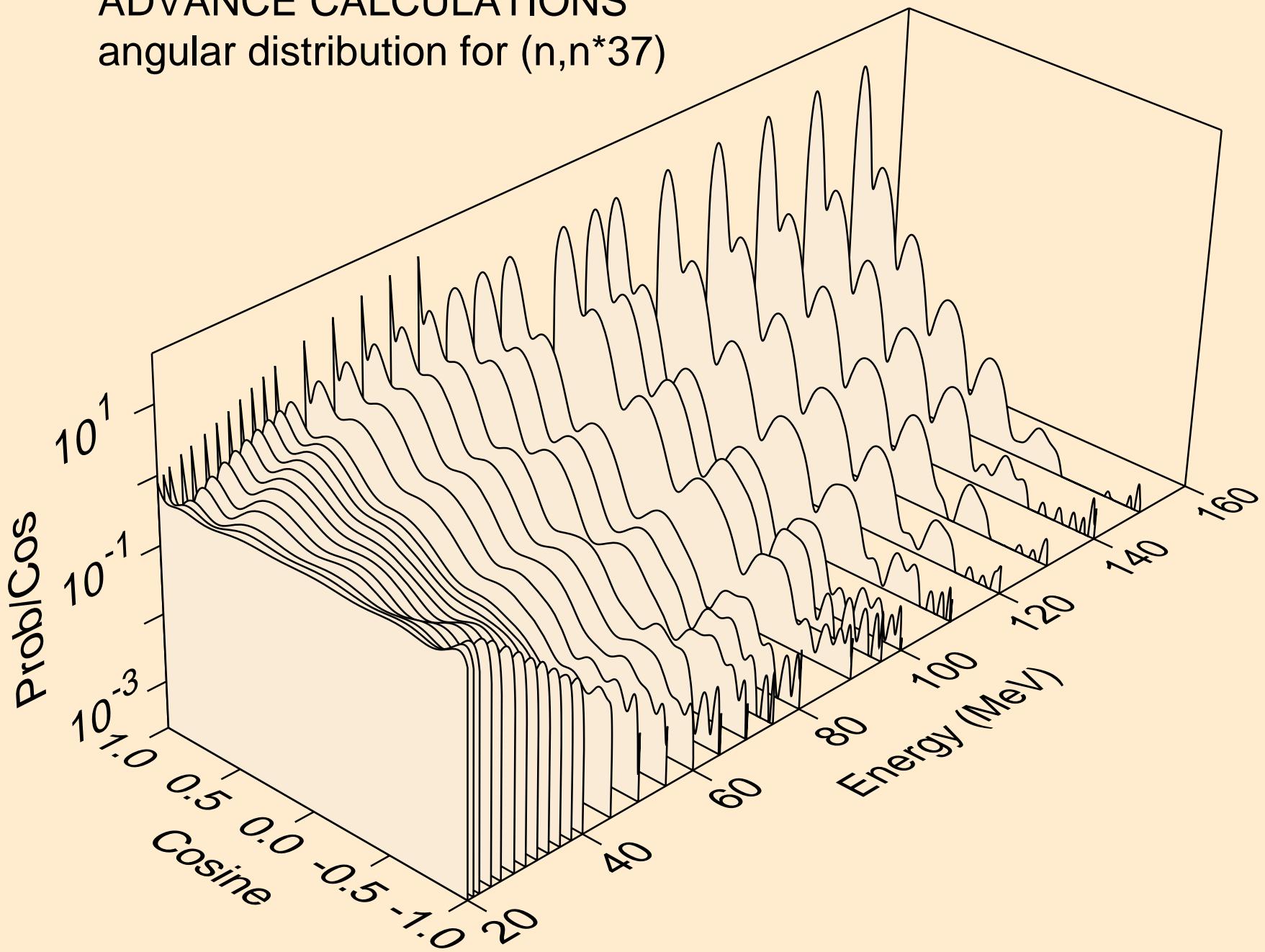
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*37)$



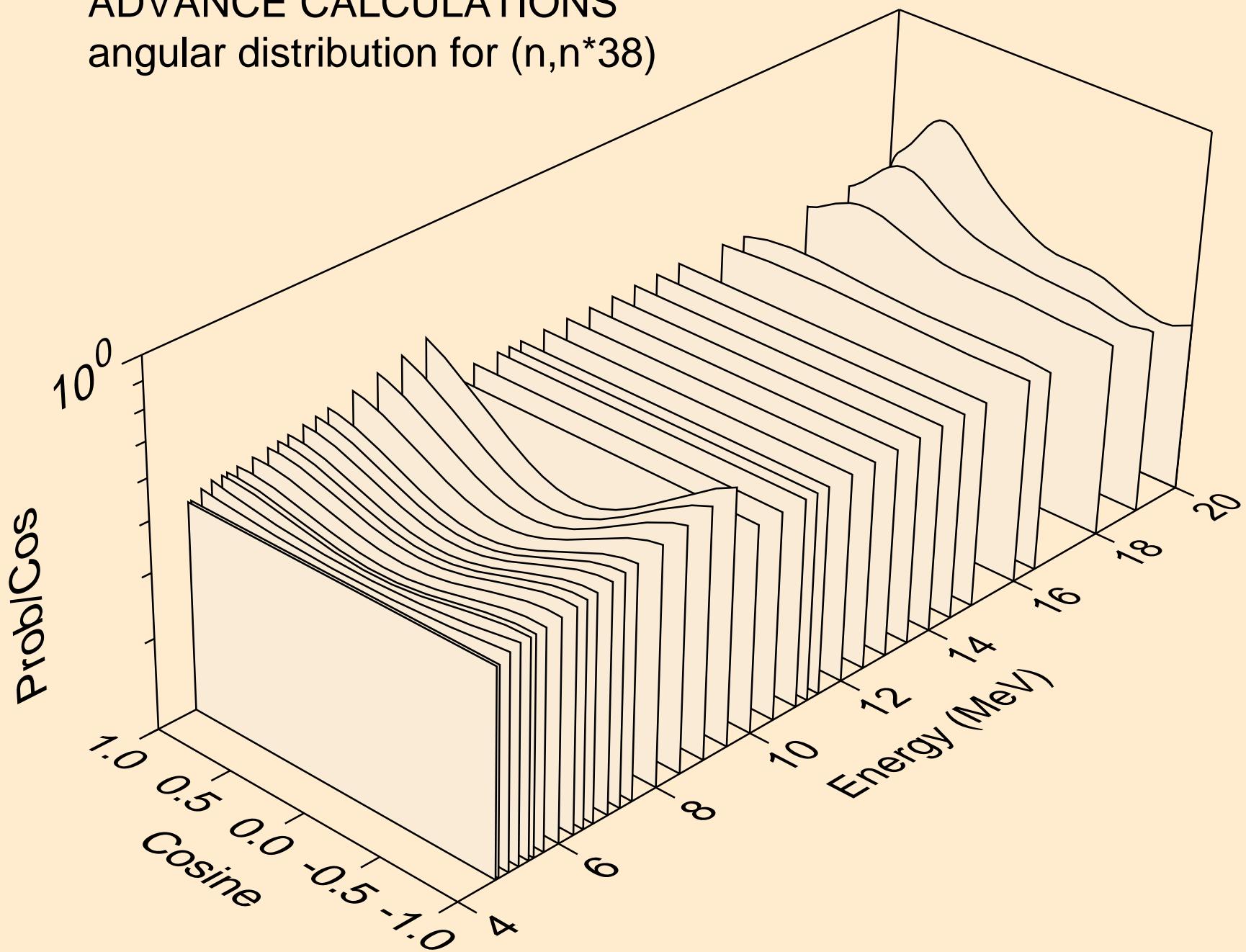
# ADVANCE CALCULATIONS

## angular distribution for ( $n, n^*37$ )



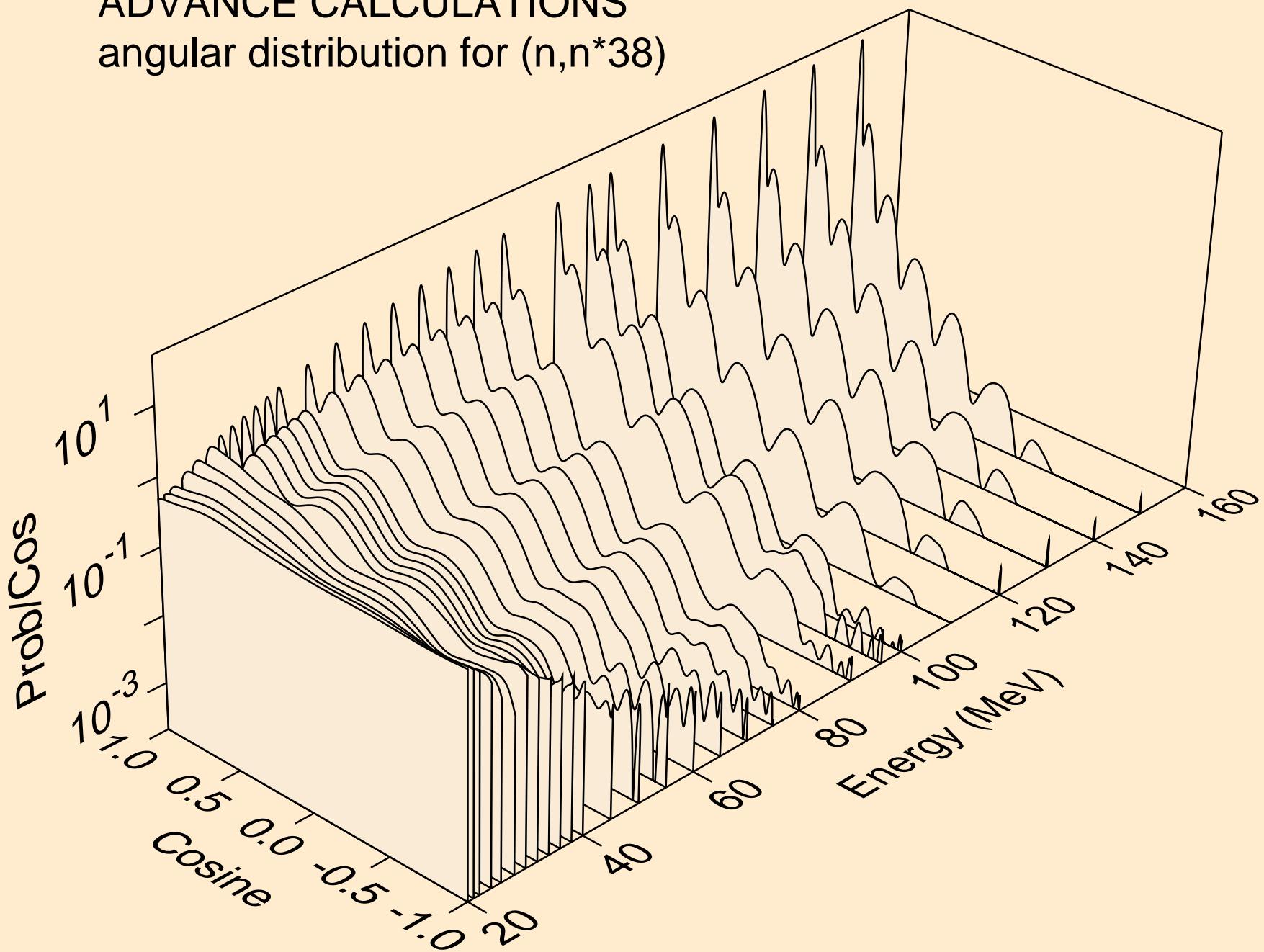
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*38)$



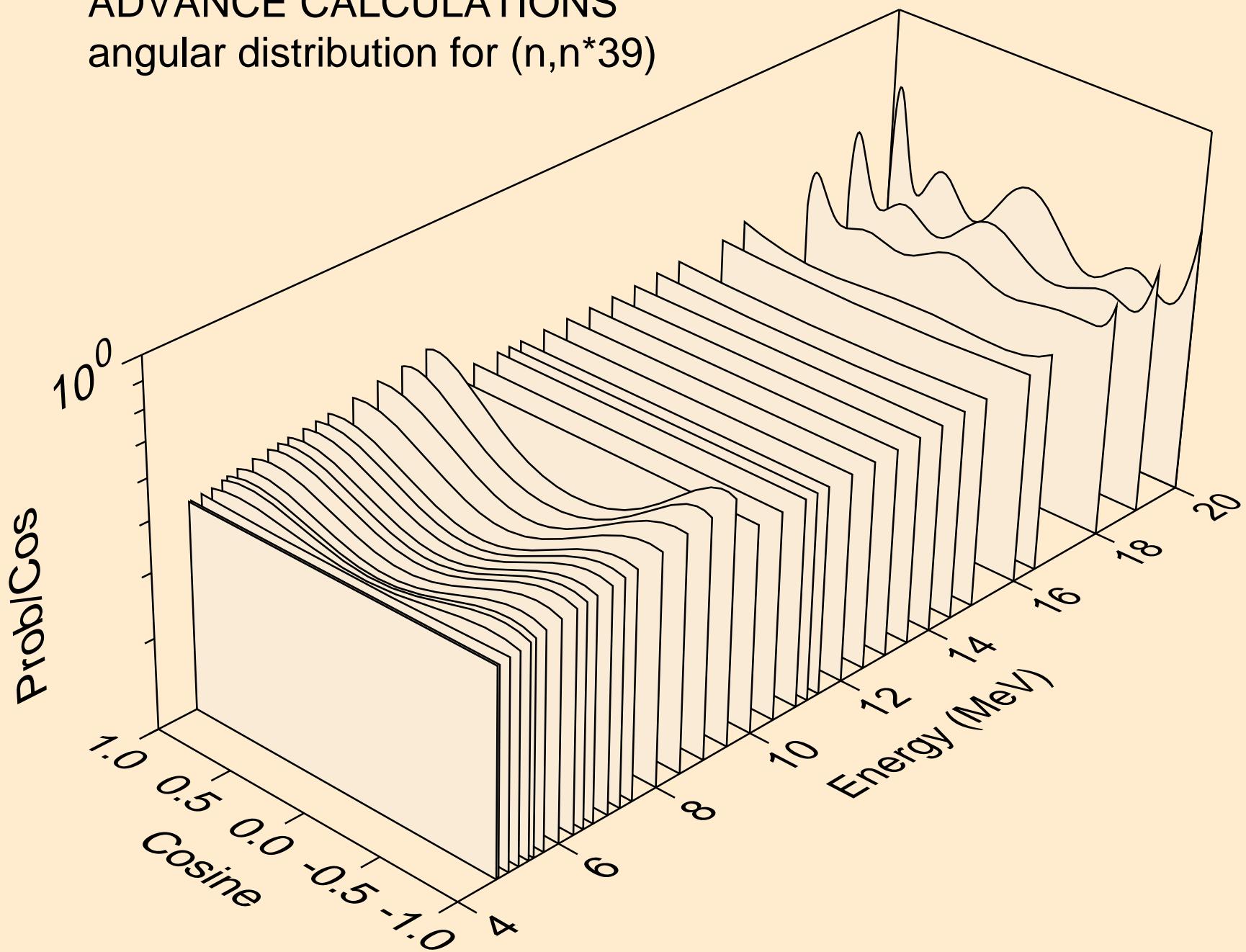
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*38)$



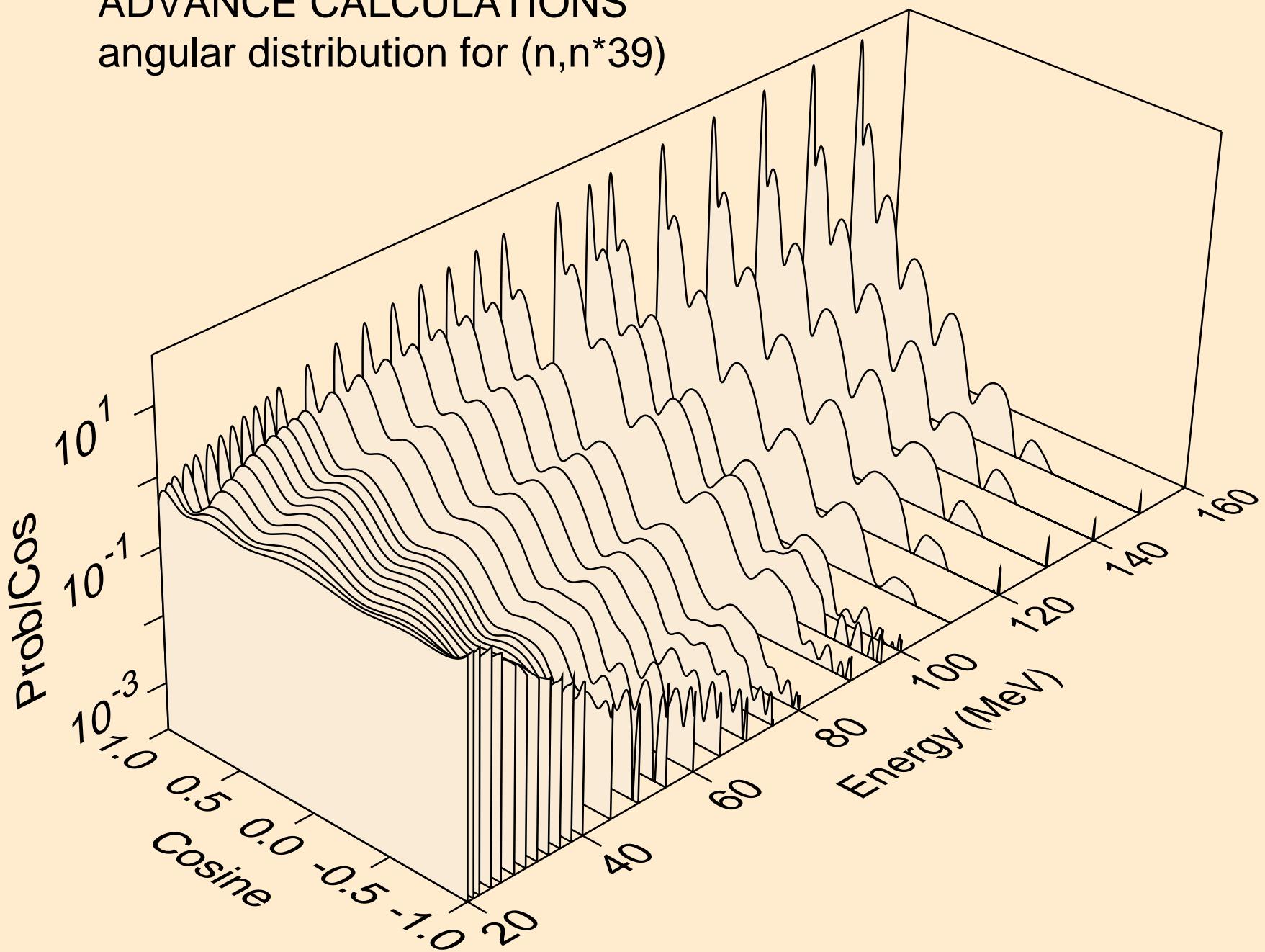
# ADVANCE CALCULATIONS

## angular distribution for ( $n, n^*39$ )



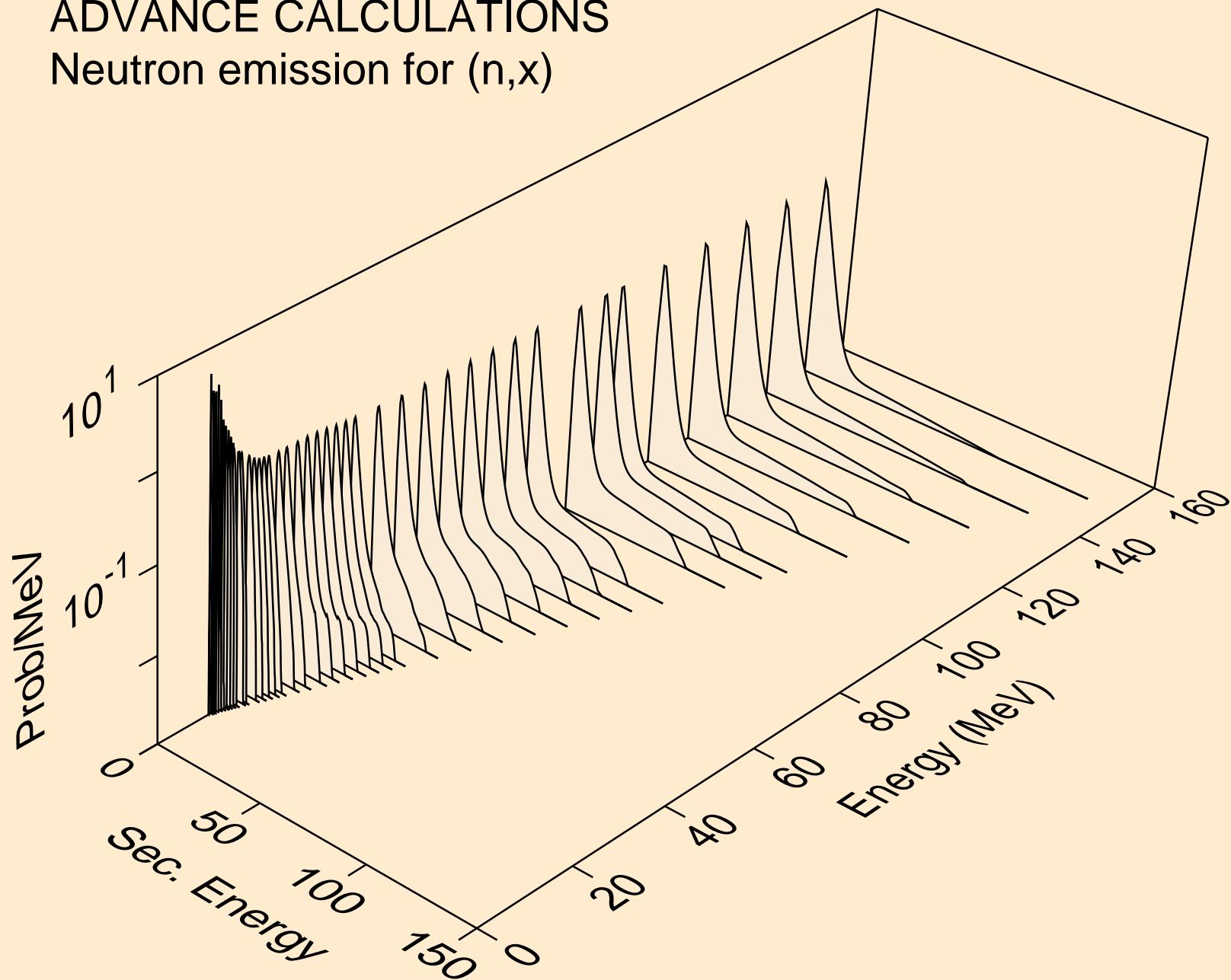
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*39)$



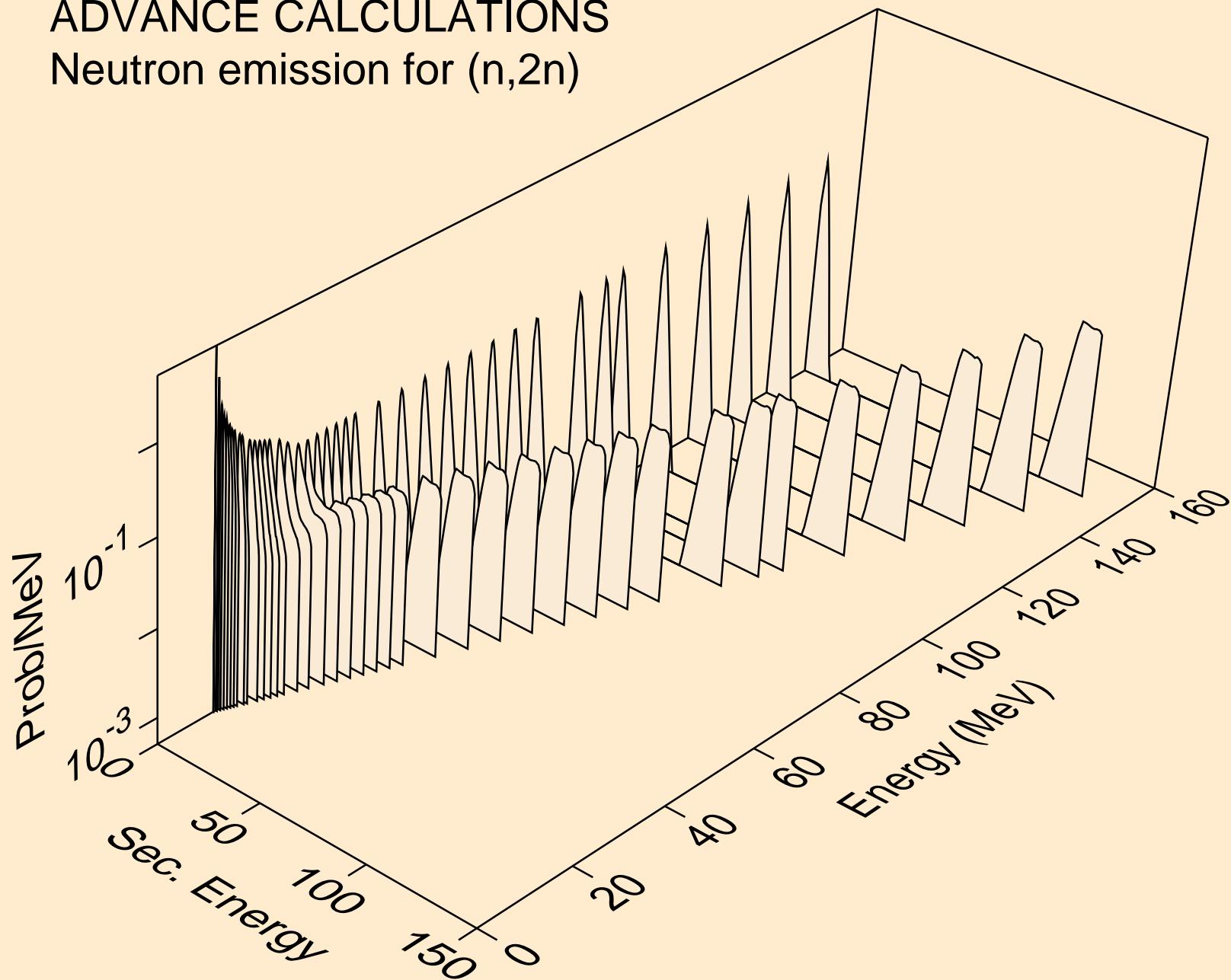
# ADVANCE CALCULATIONS

## Neutron emission for (n,x)



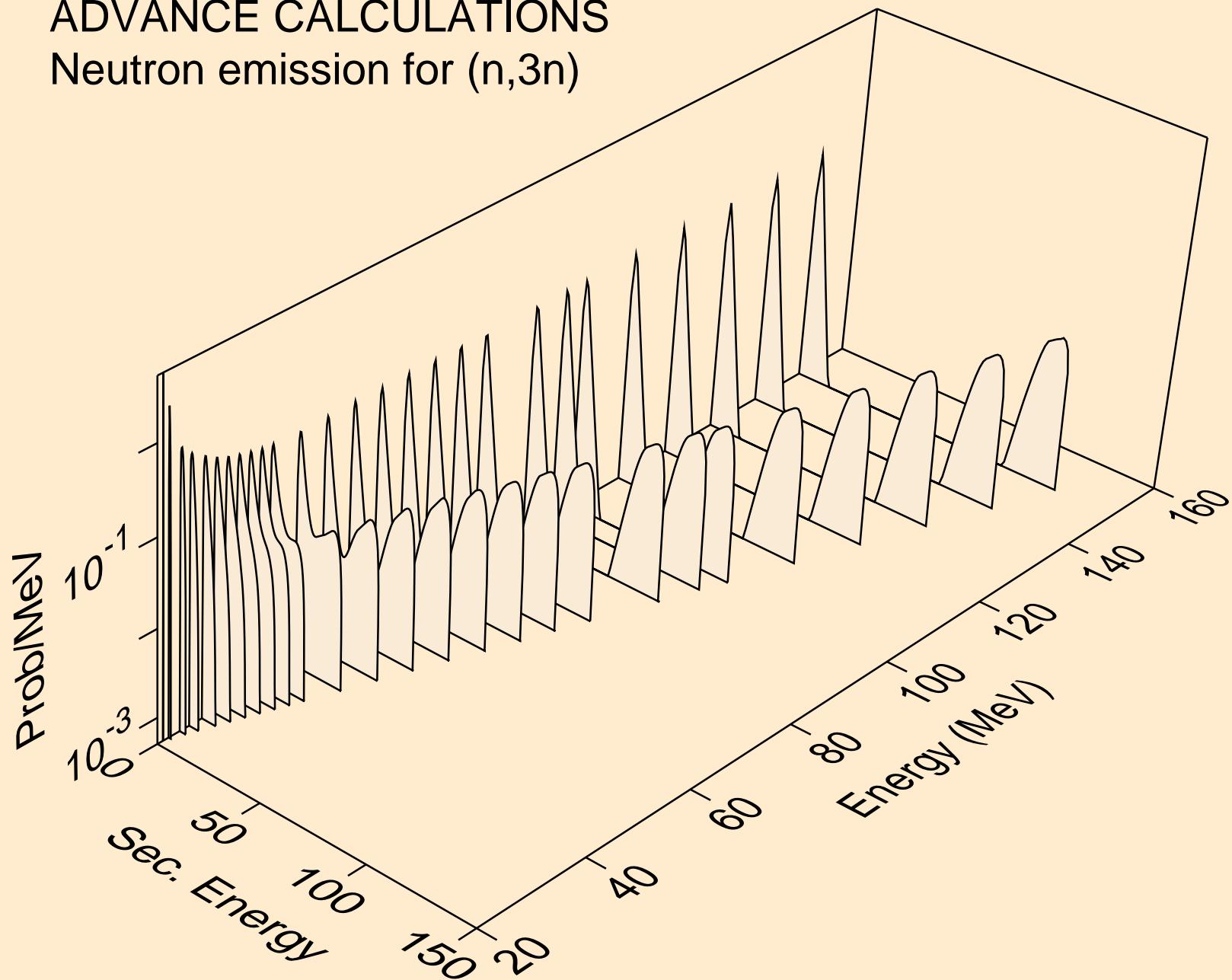
# ADVANCE CALCULATIONS

## Neutron emission for (n,2n)



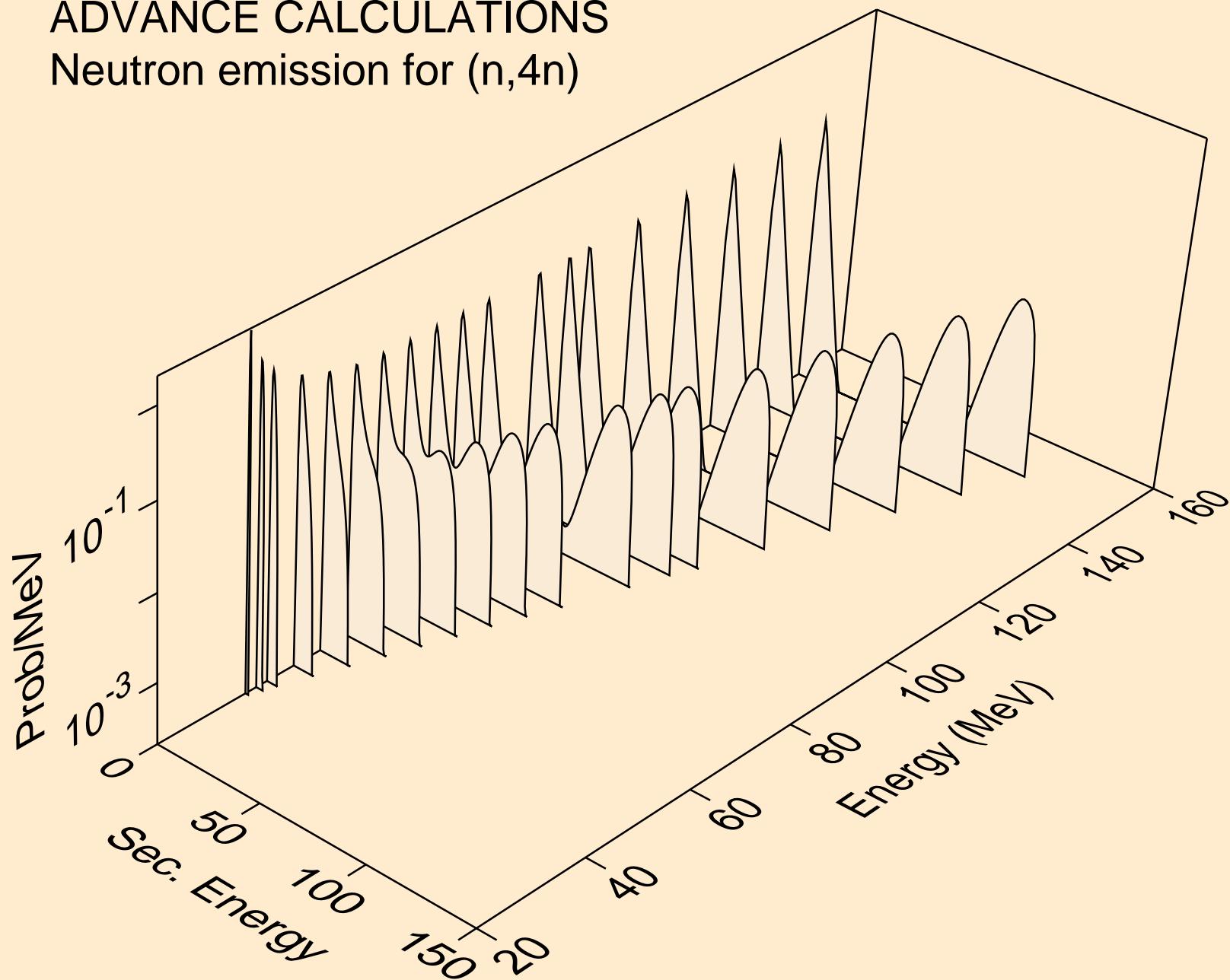
# ADVANCE CALCULATIONS

## Neutron emission for (n,3n)



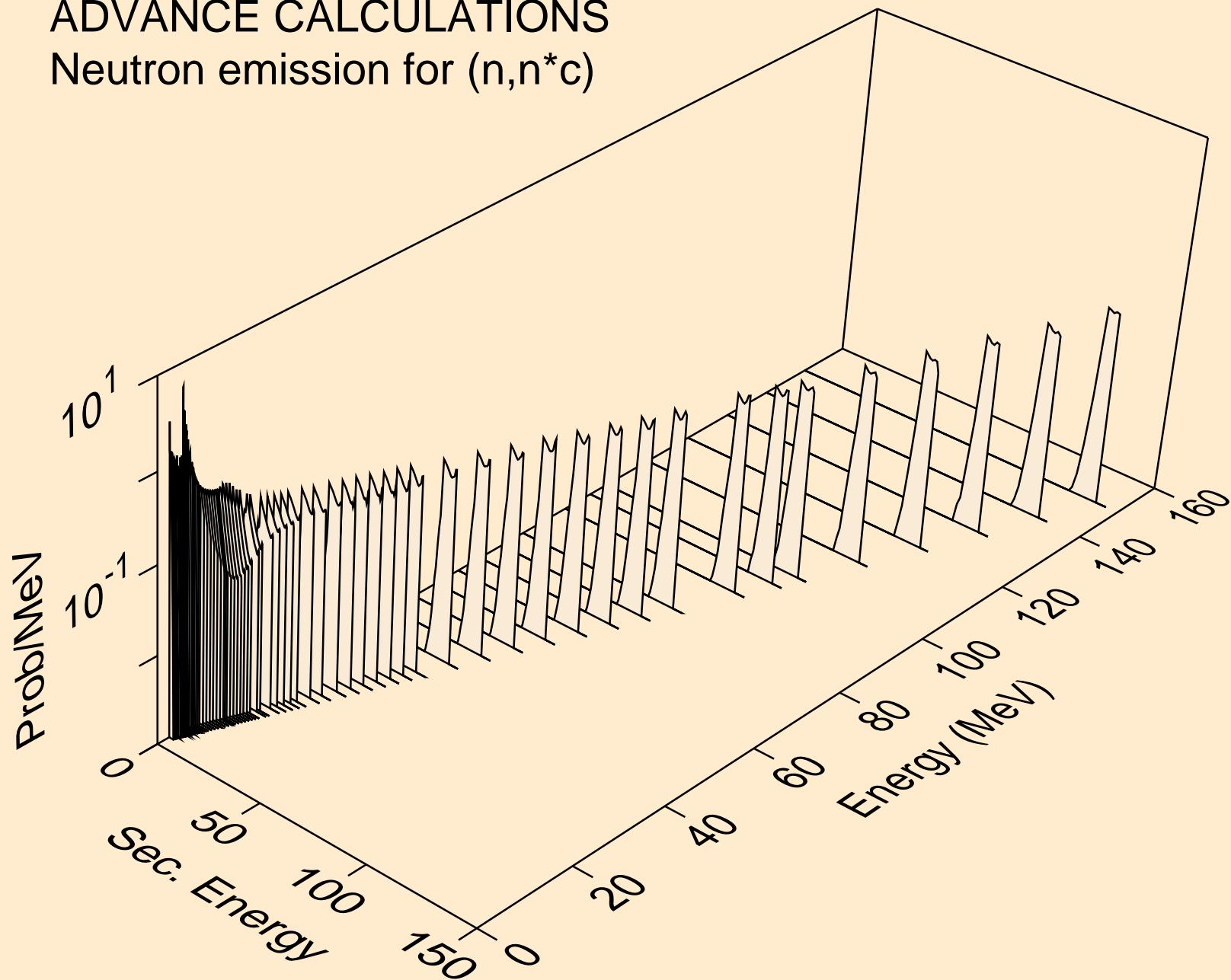
# ADVANCE CALCULATIONS

## Neutron emission for (n,4n)



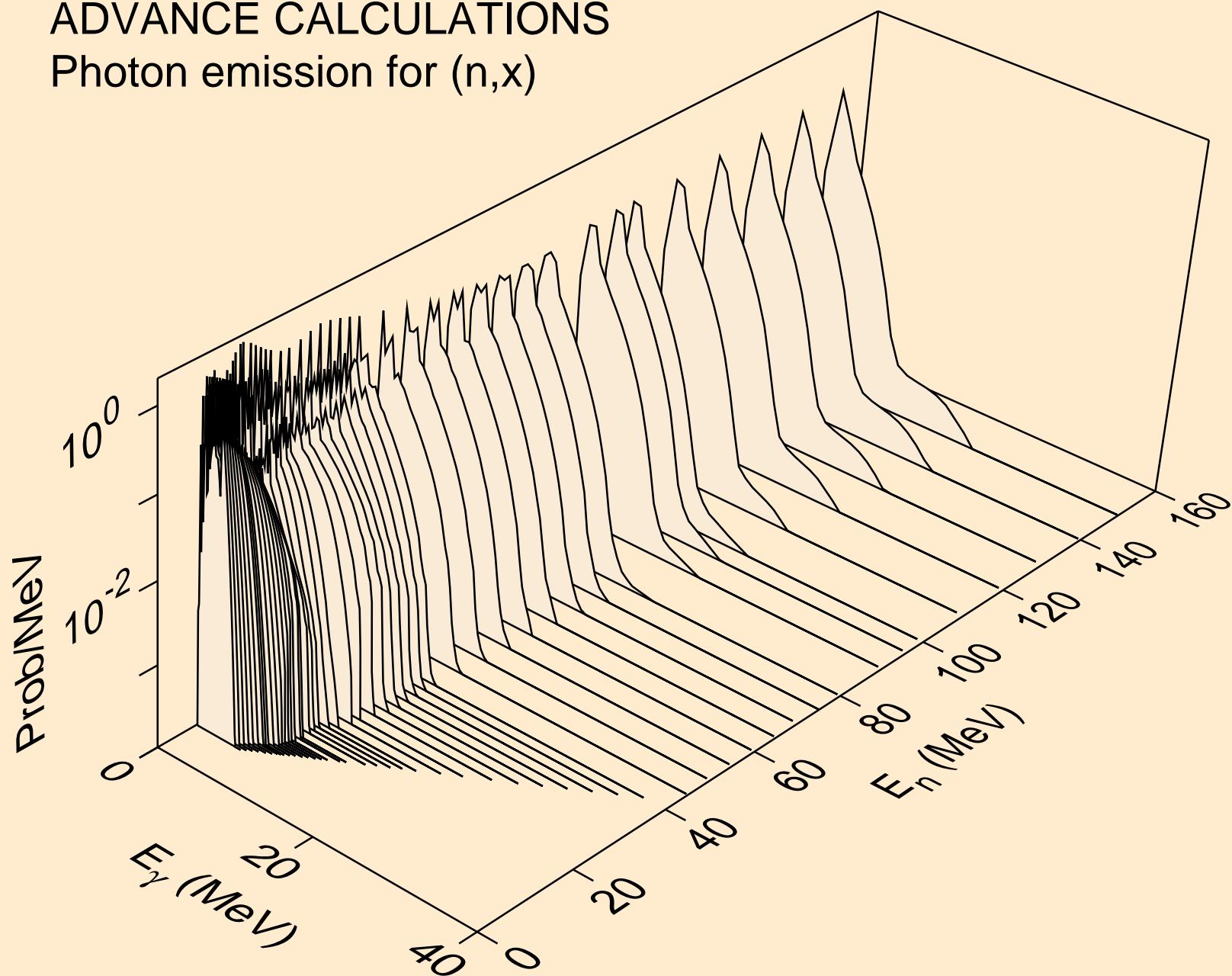
# ADVANCE CALCULATIONS

## Neutron emission for $(n,n^*c)$



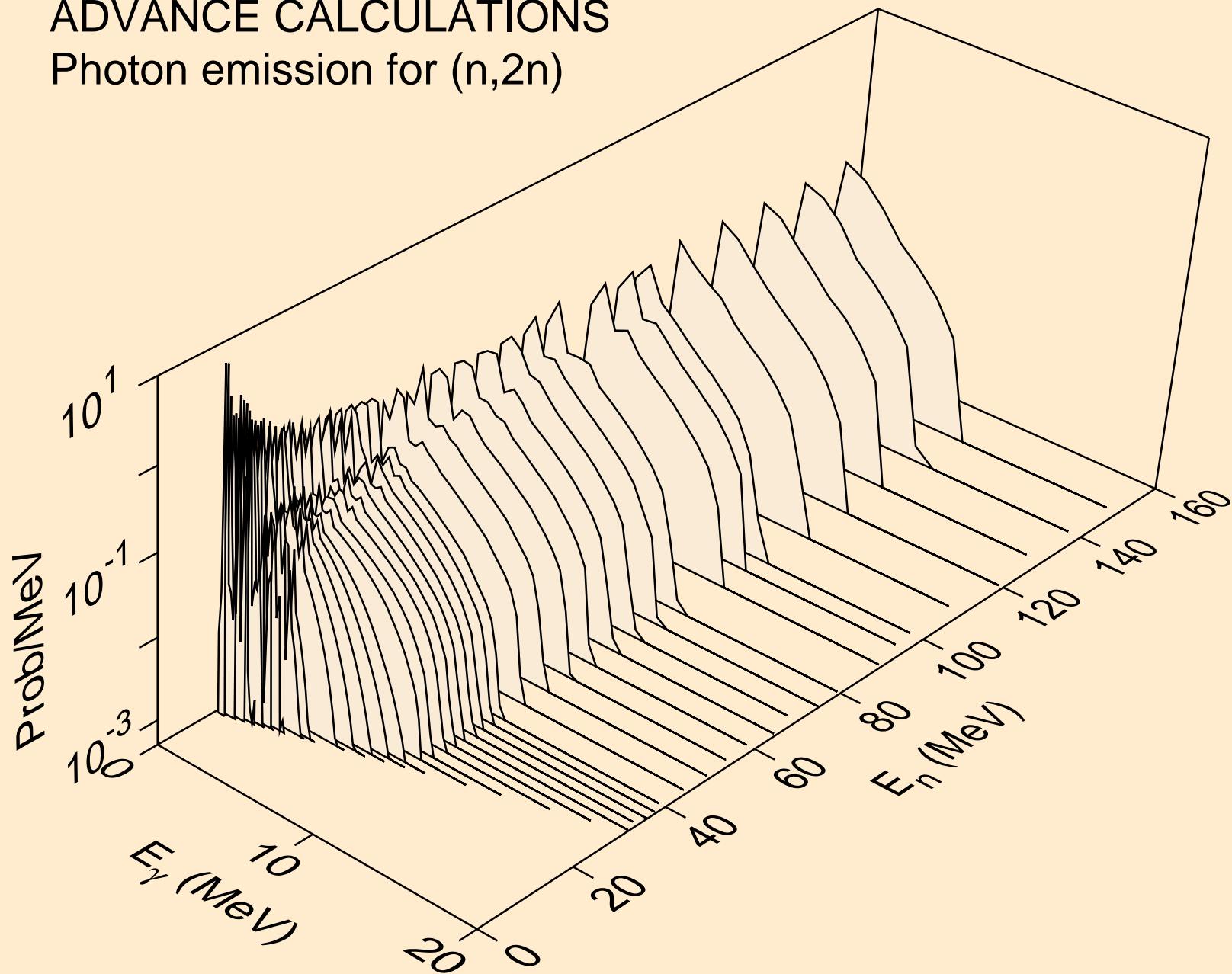
# ADVANCE CALCULATIONS

## Photon emission for (n,x)



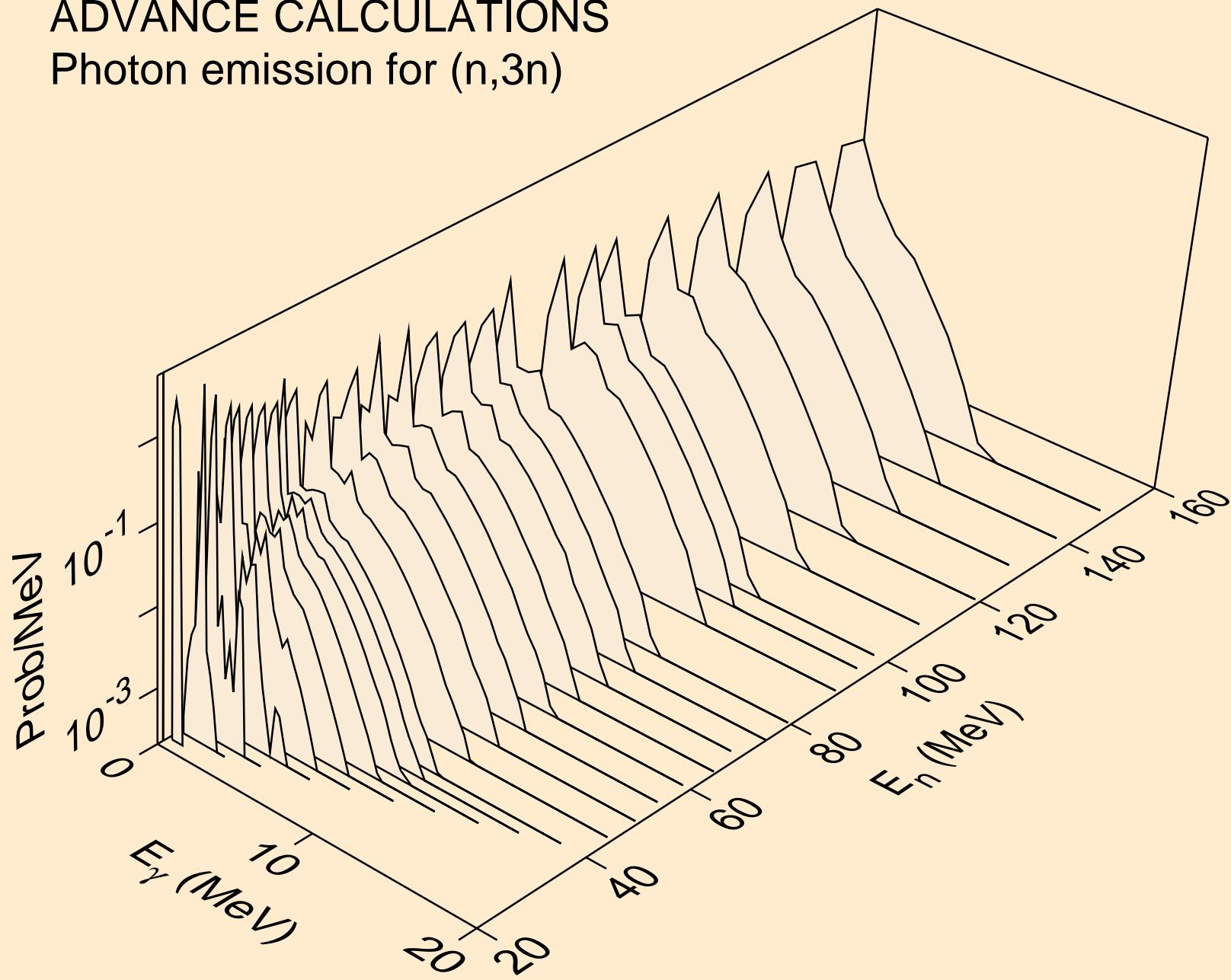
# ADVANCE CALCULATIONS

## Photon emission for (n,2n)



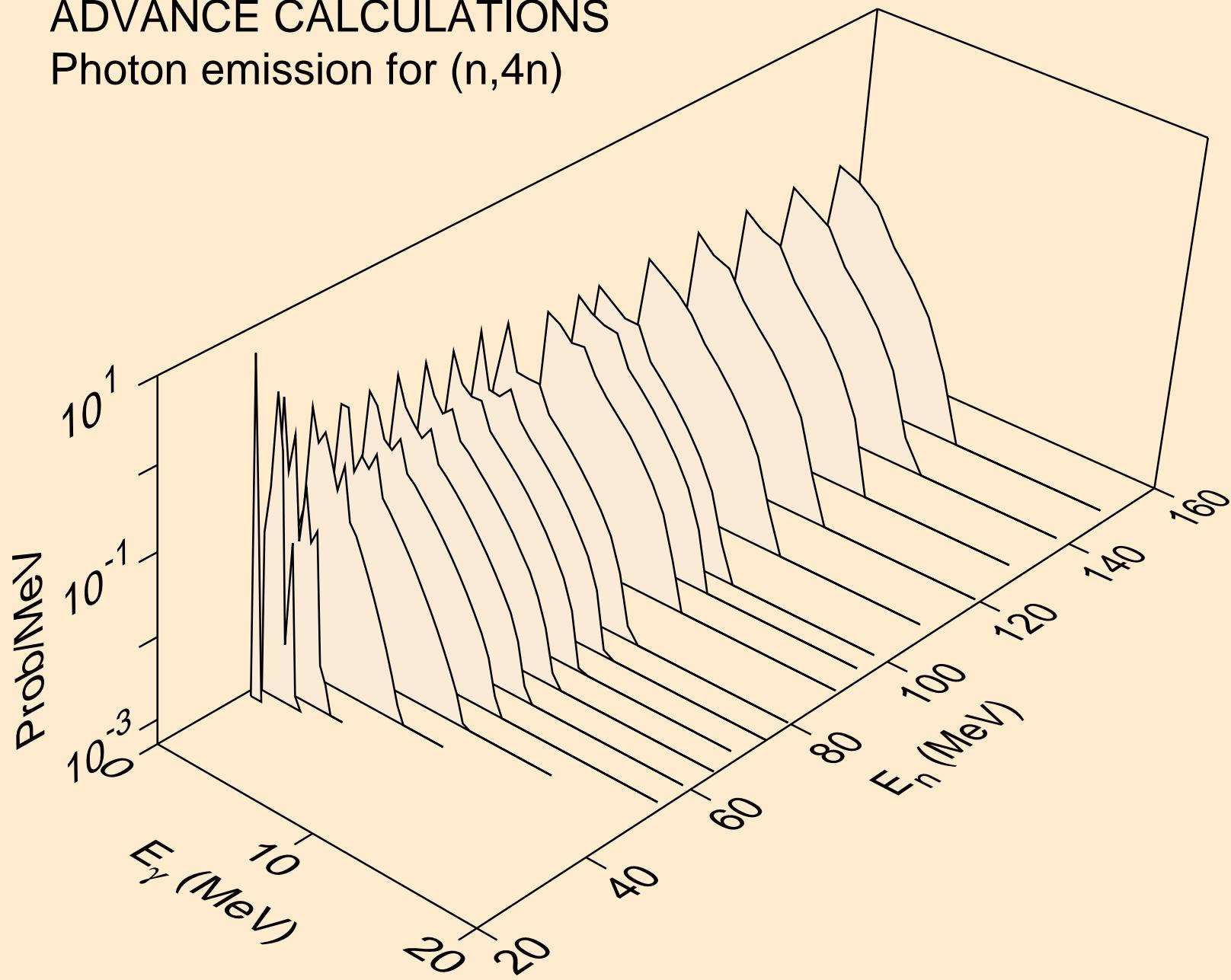
# ADVANCE CALCULATIONS

## Photon emission for (n,3n)



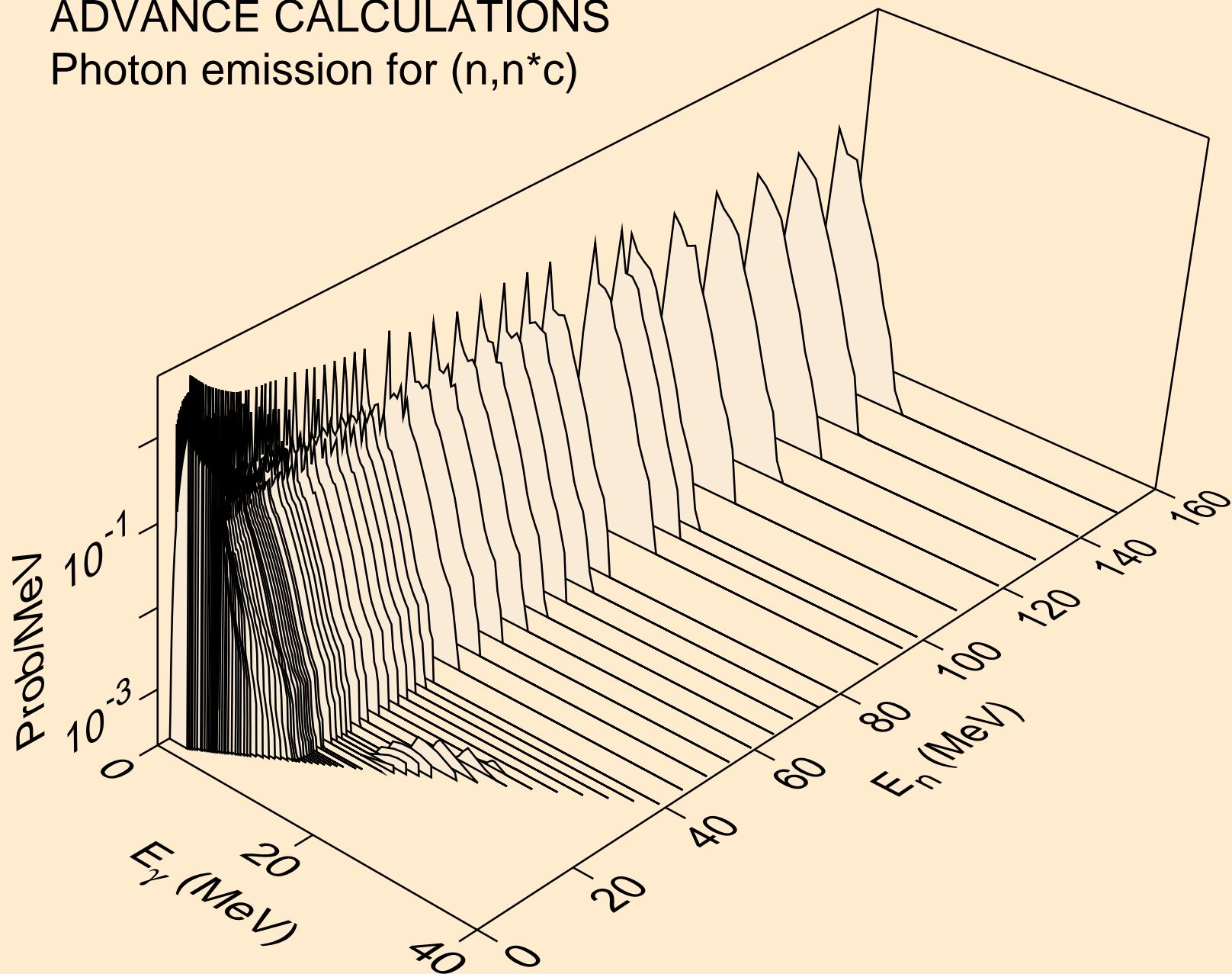
# ADVANCE CALCULATIONS

## Photon emission for (n,4n)



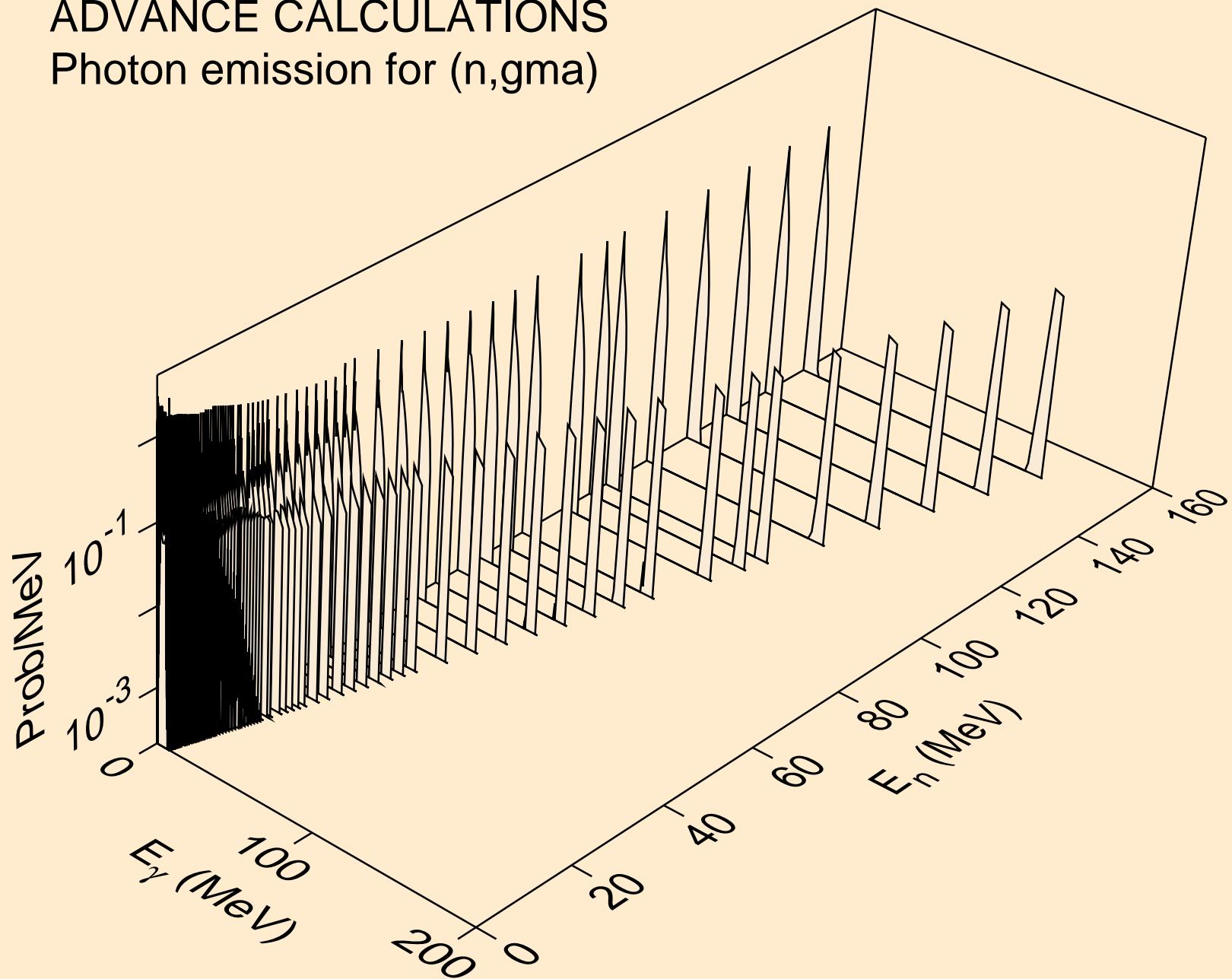
# ADVANCE CALCULATIONS

## Photon emission for $(n,n^*c)$



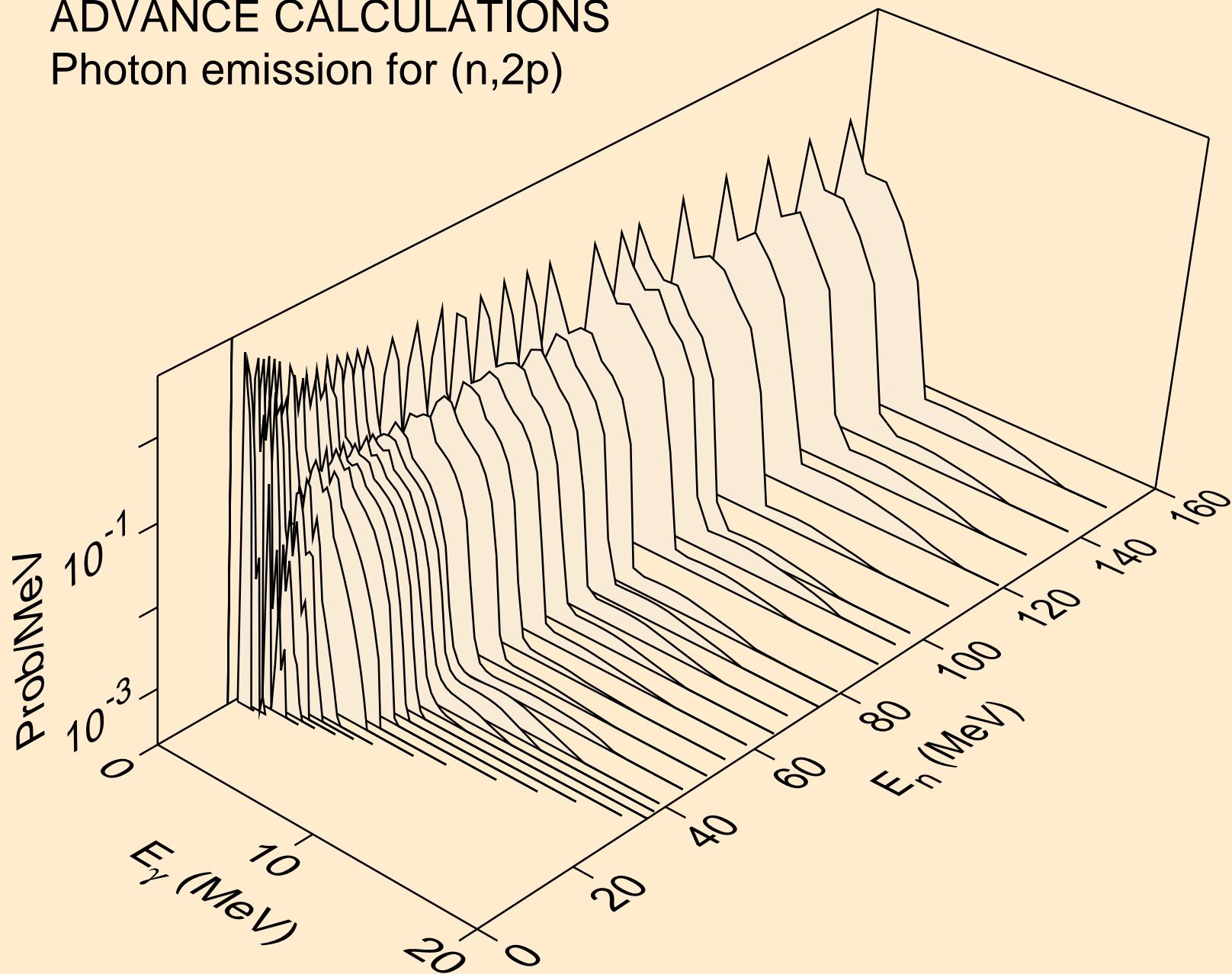
# ADVANCE CALCULATIONS

## Photon emission for (n,gma)



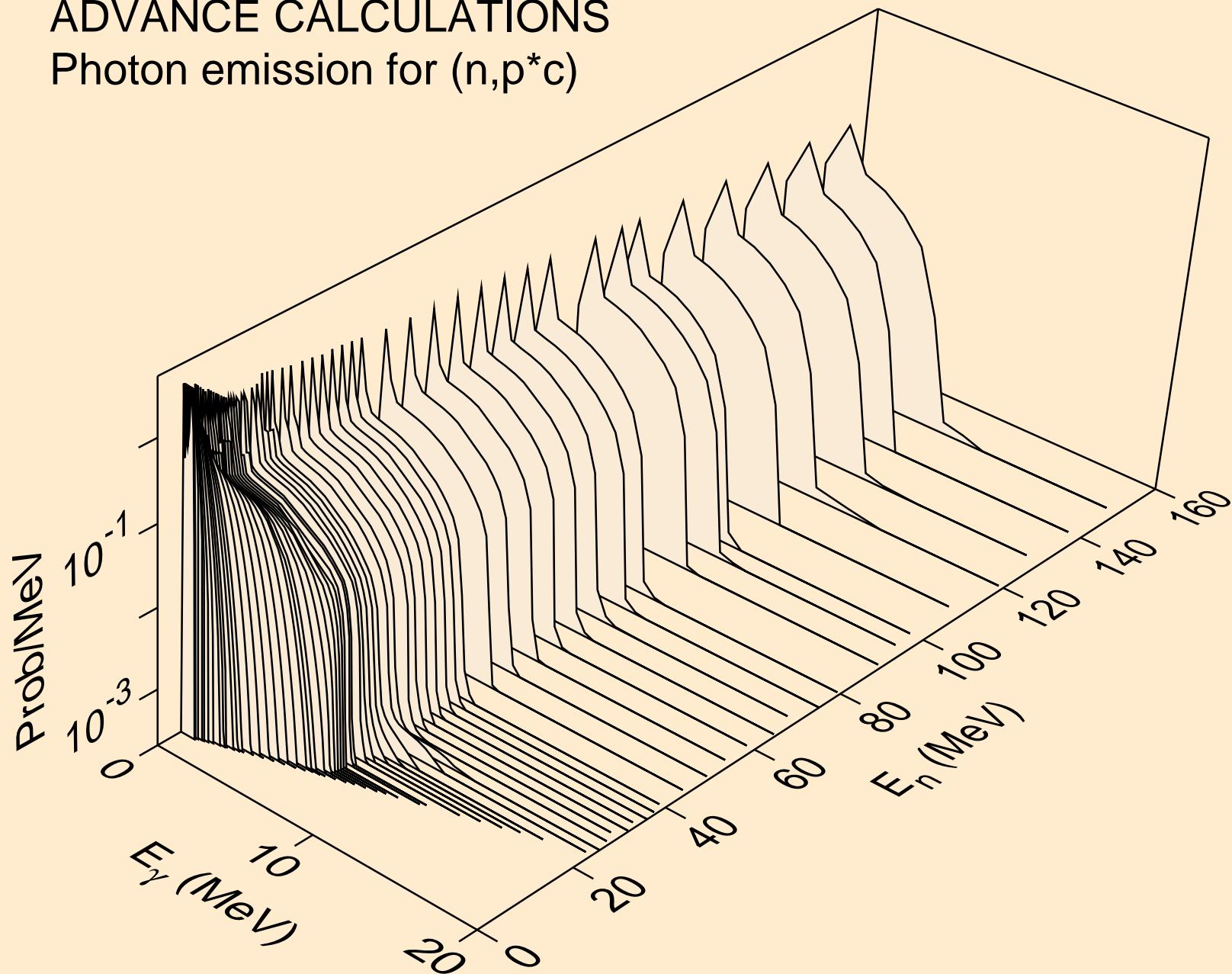
# ADVANCE CALCULATIONS

## Photon emission for (n,2p)



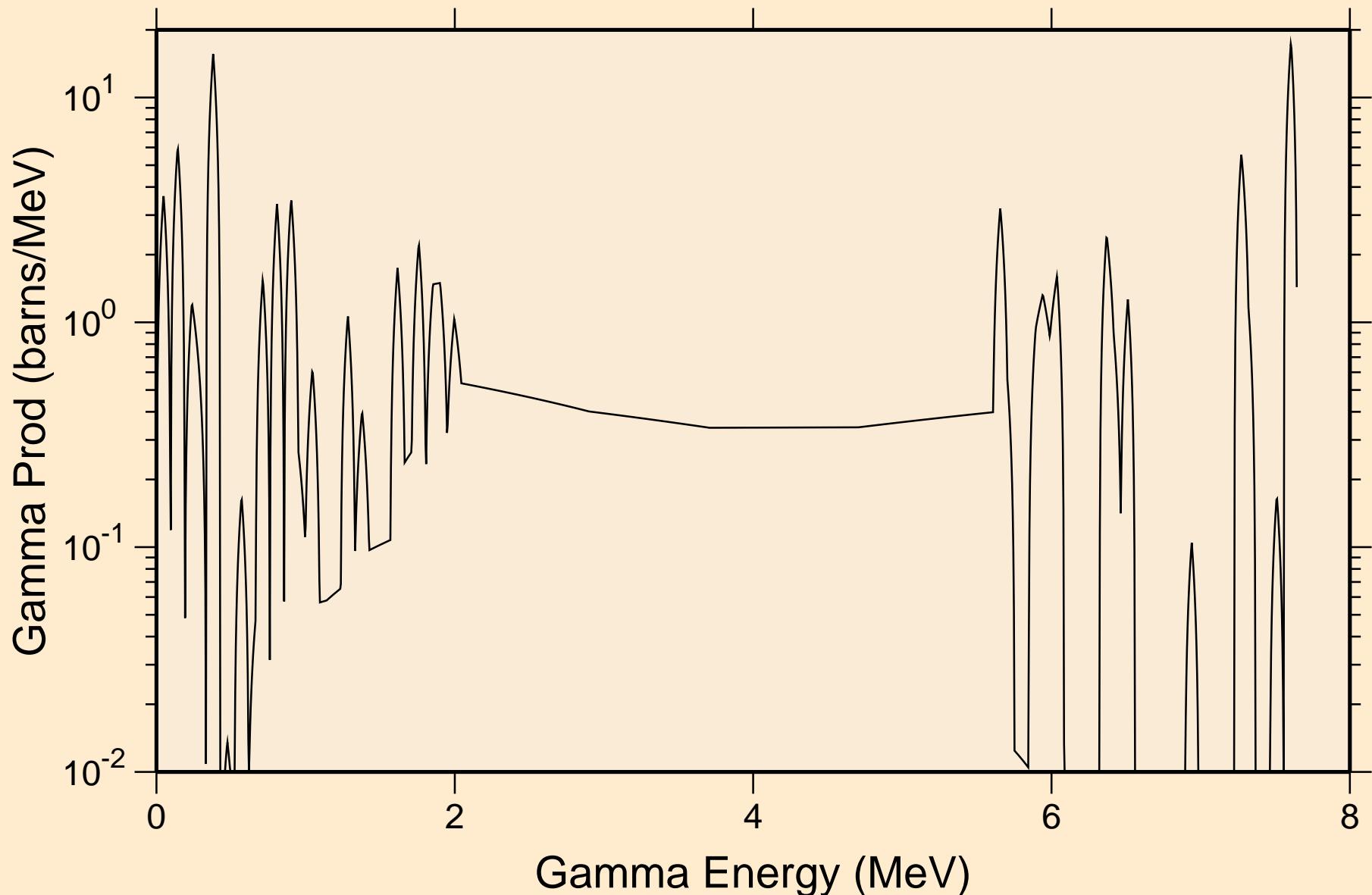
# ADVANCE CALCULATIONS

## Photon emission for $(n, p^* c)$

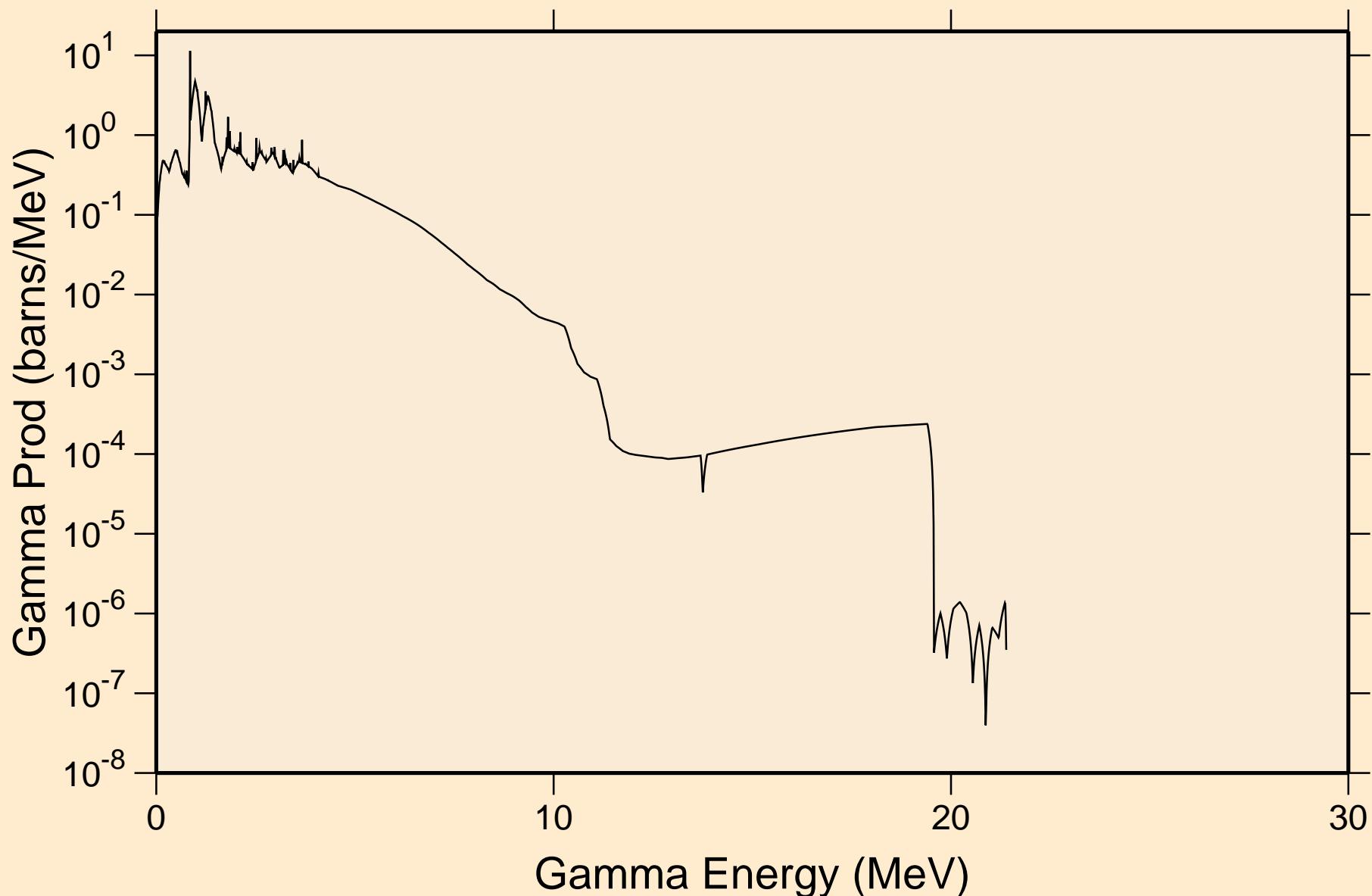


# ADVANCE CALCULATIONS

## thermal capture photon spectrum

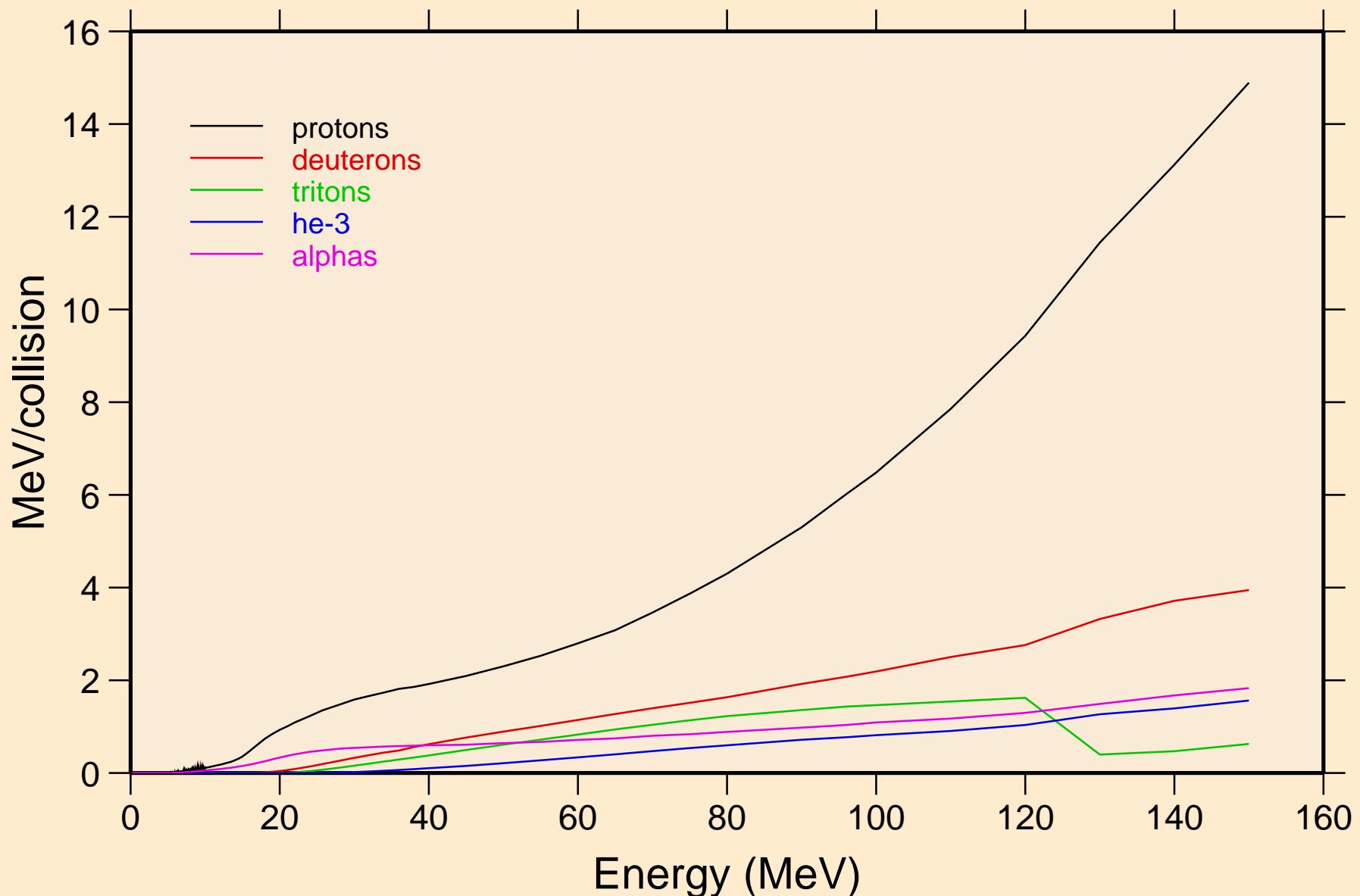


ADVANCE CALCULATIONS  
14 MeV photon spectrum



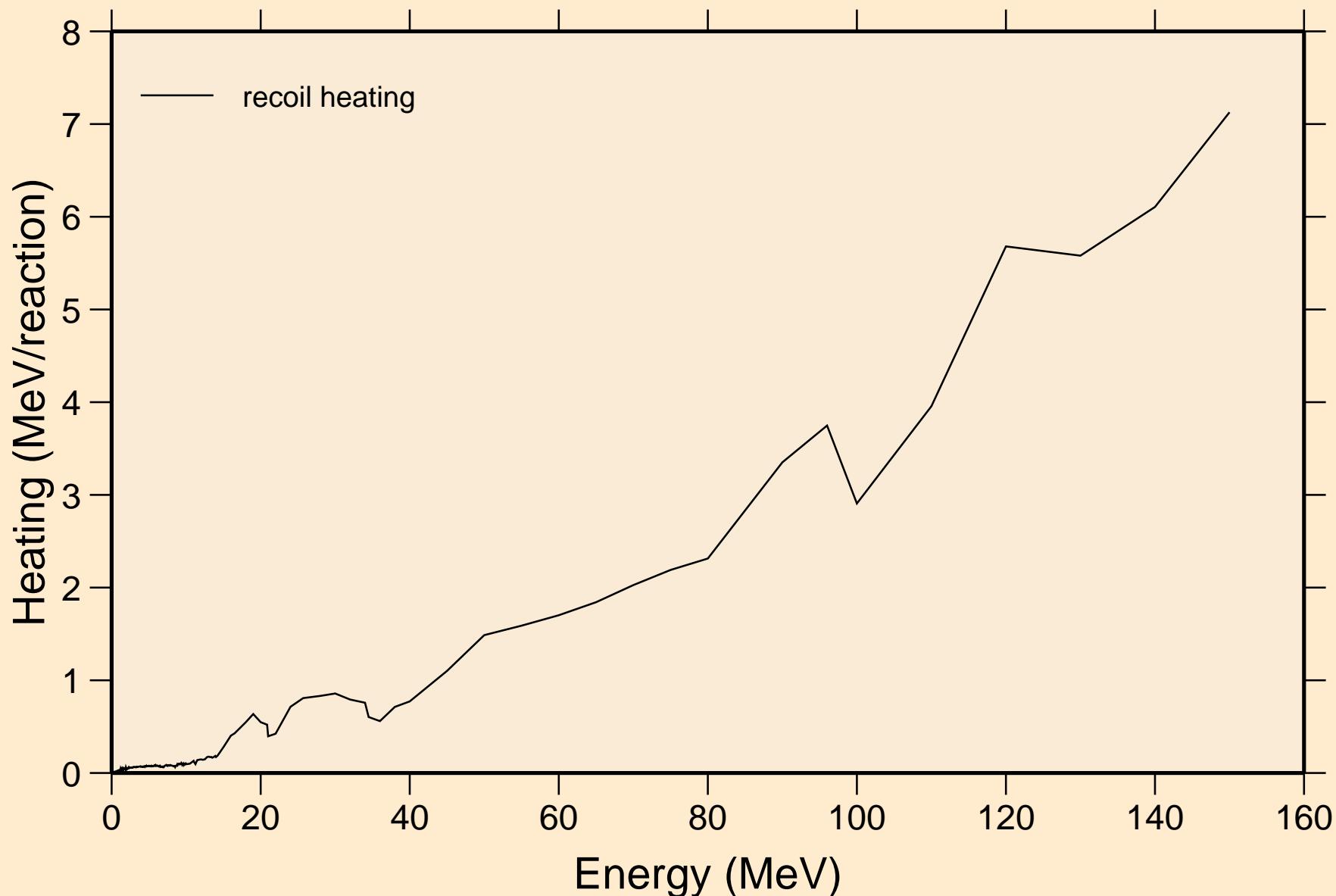
# ADVANCE CALCULATIONS

## Particle heating contributions



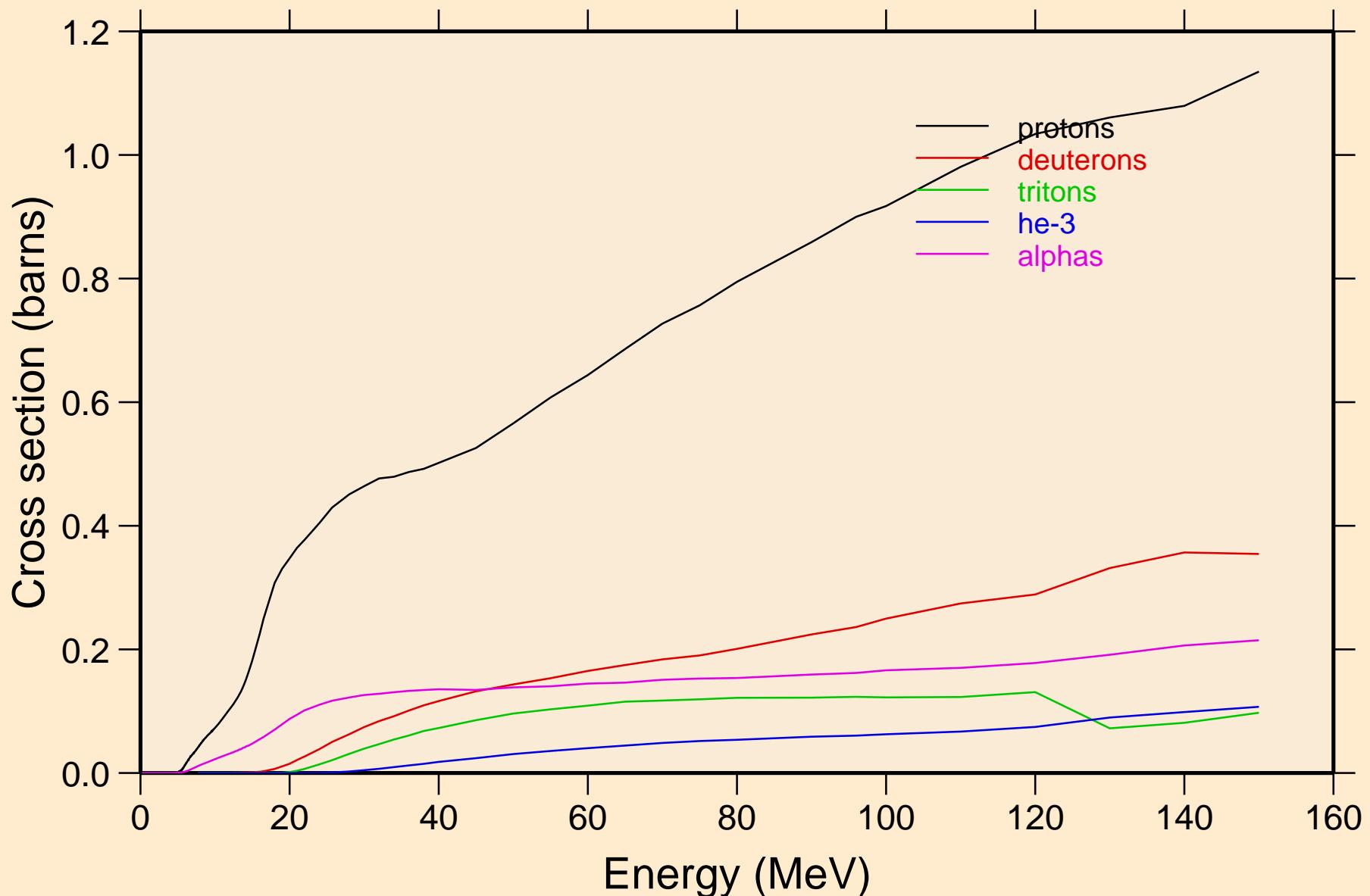
# ADVANCE CALCULATIONS

## Recoil Heating



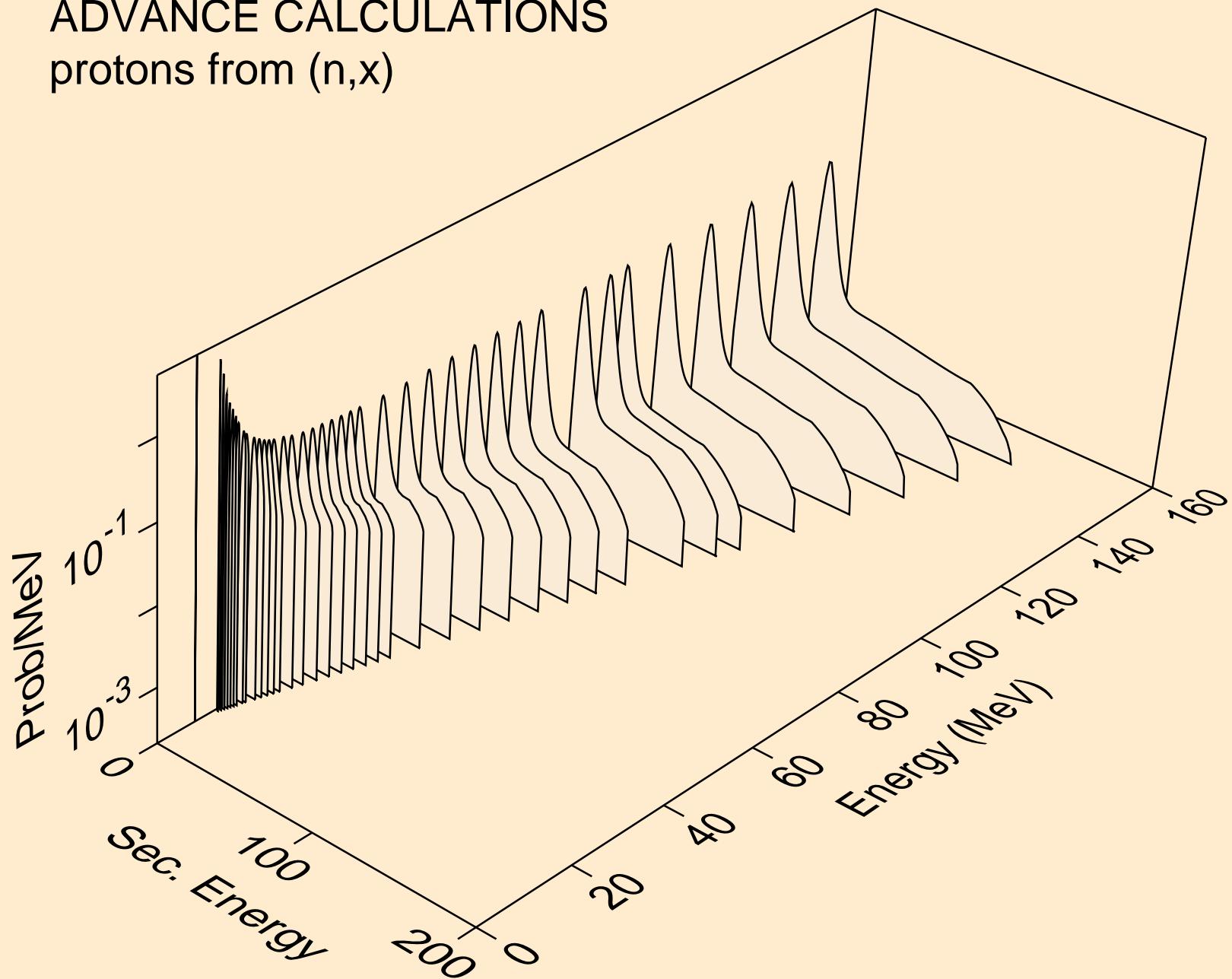
# ADVANCE CALCULATIONS

## Particle production cross sections



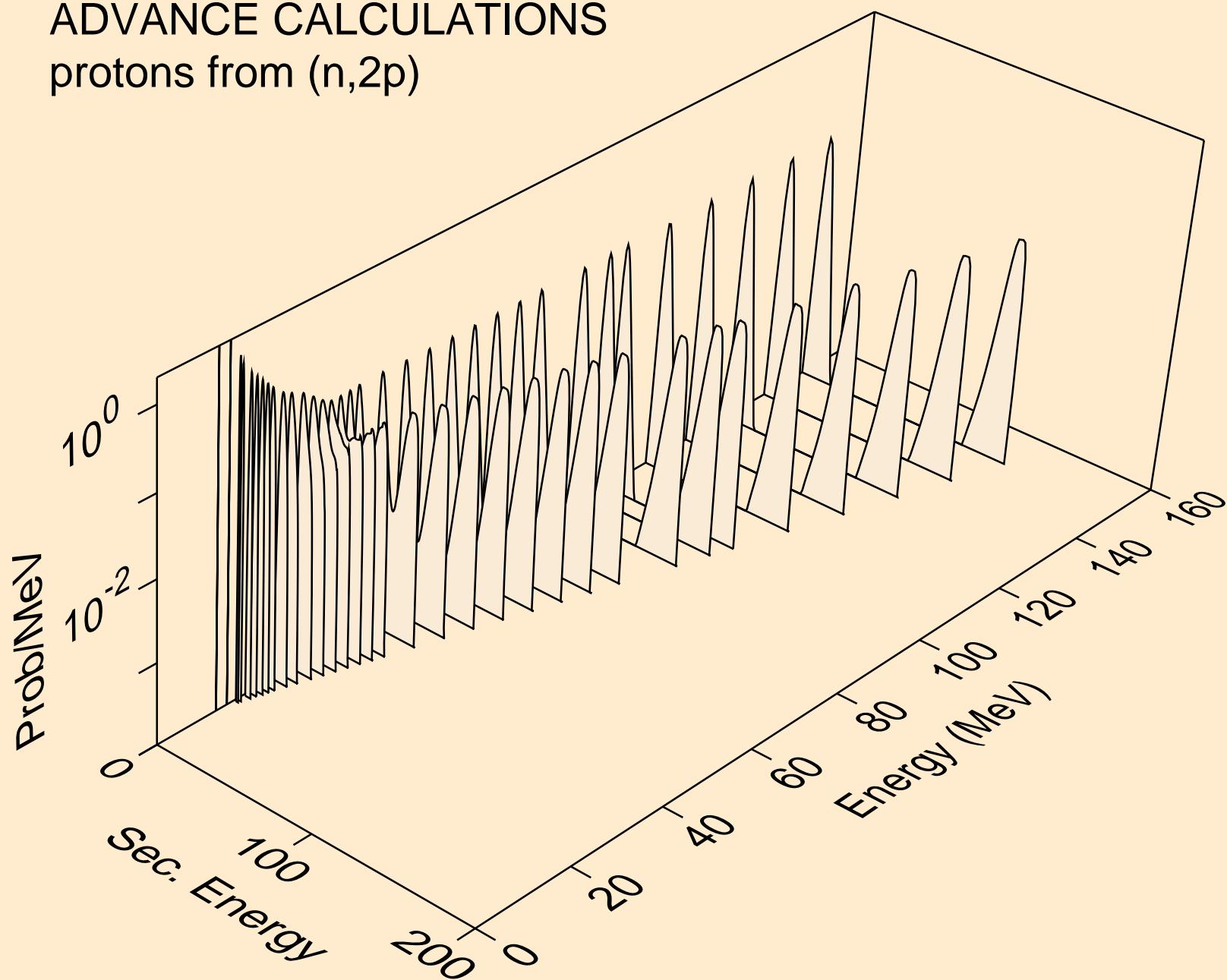
# ADVANCE CALCULATIONS

protons from ( $n, x$ )



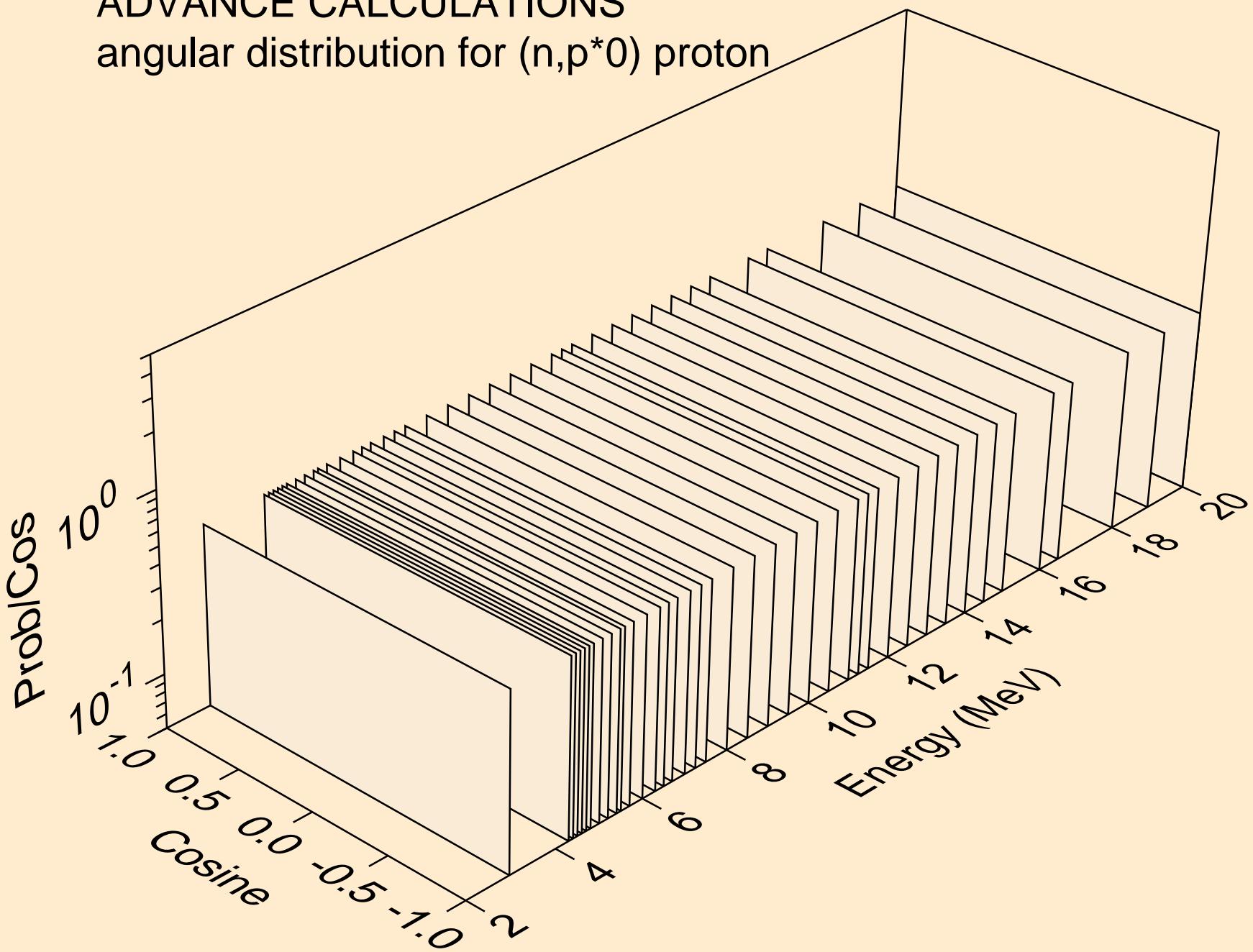
# ADVANCE CALCULATIONS

protons from (n,2p)



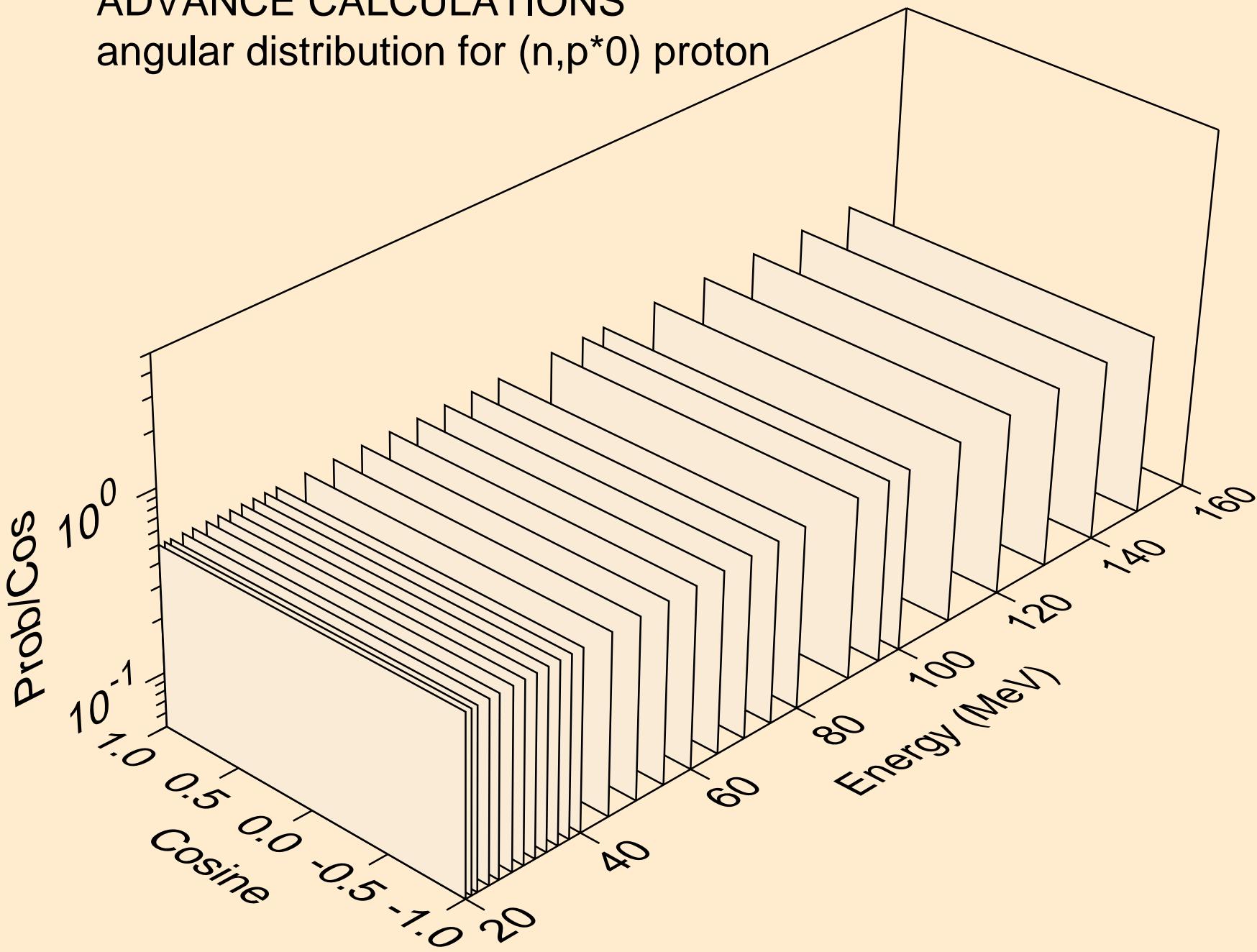
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*0)$ proton



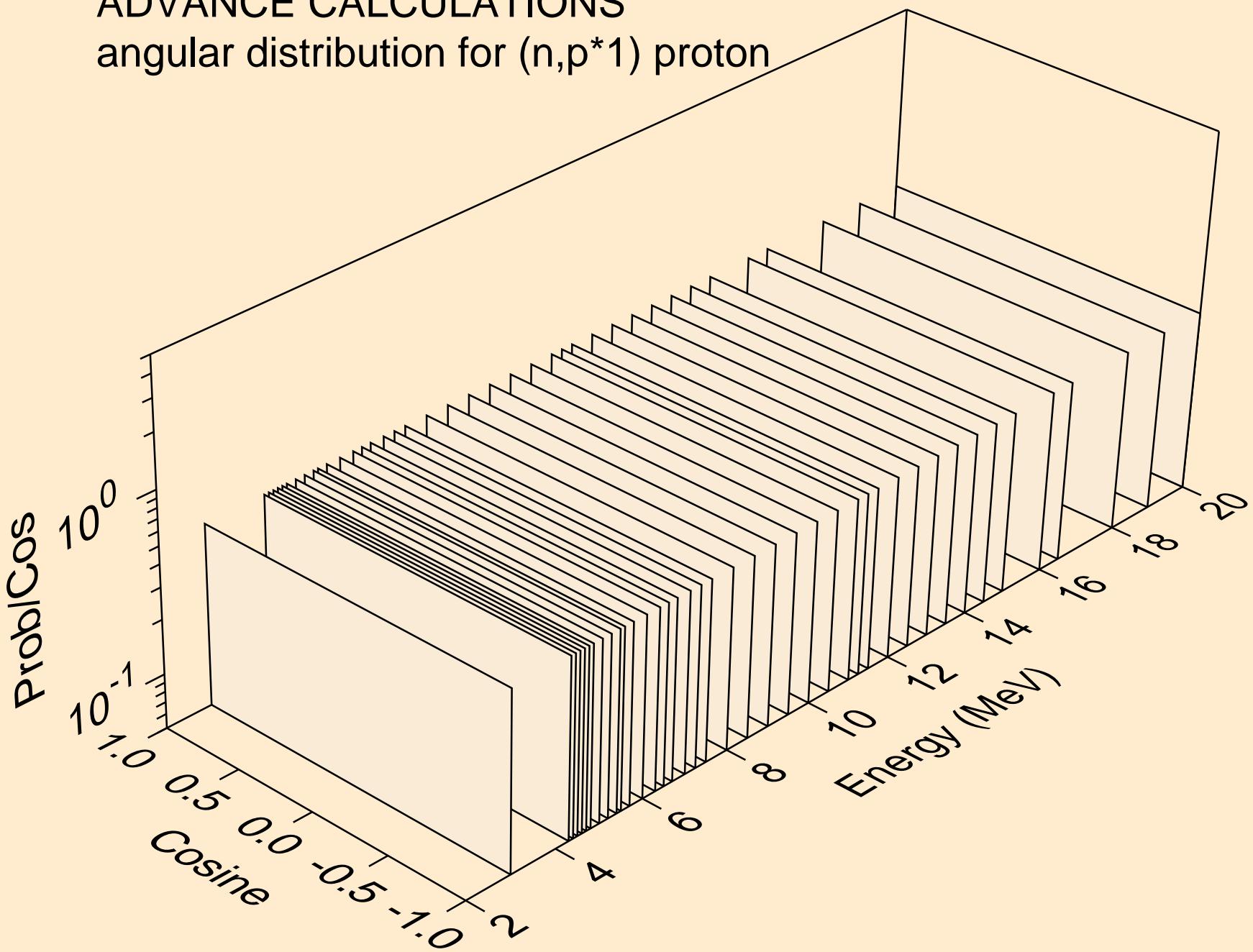
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*0)$ proton



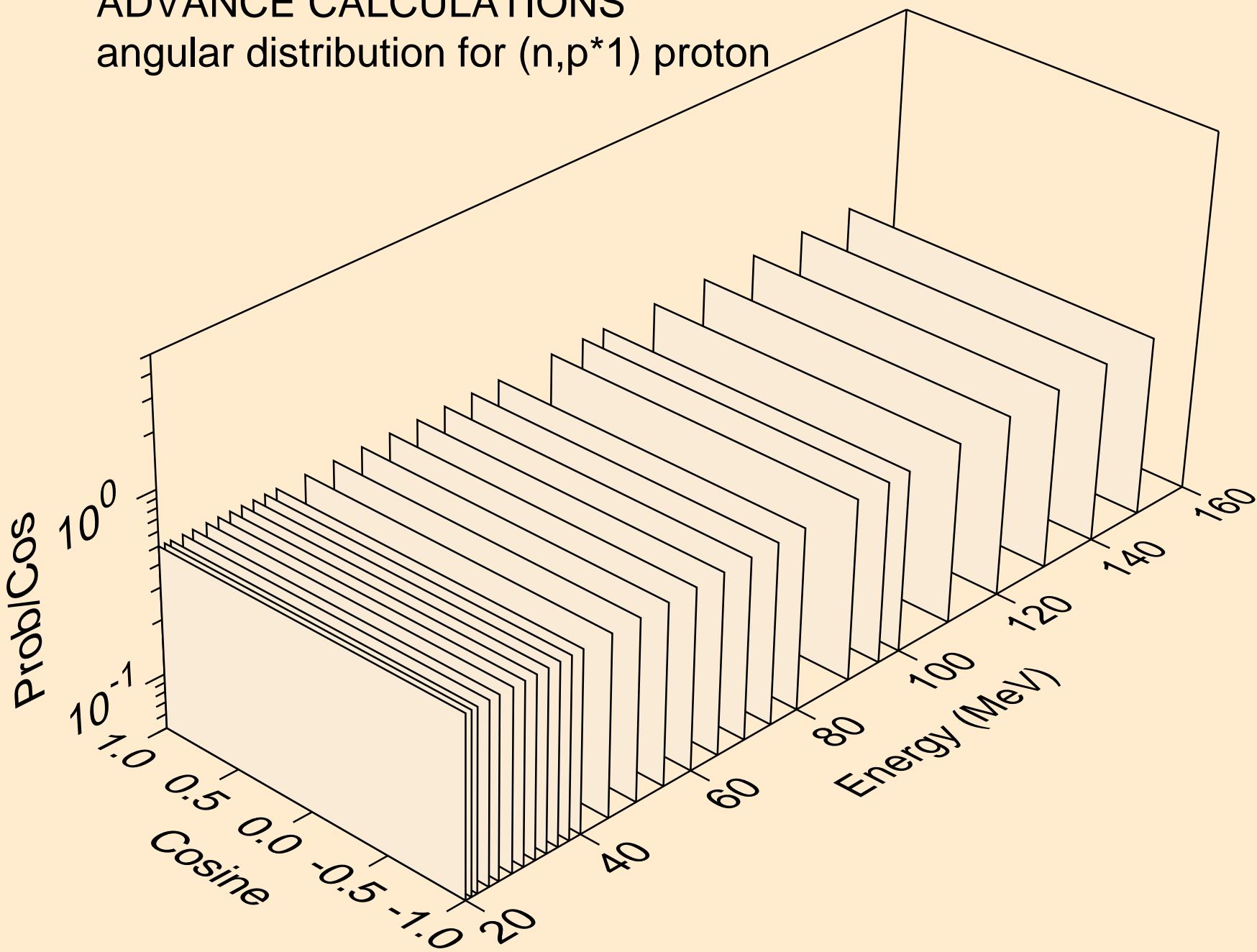
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*1) proton



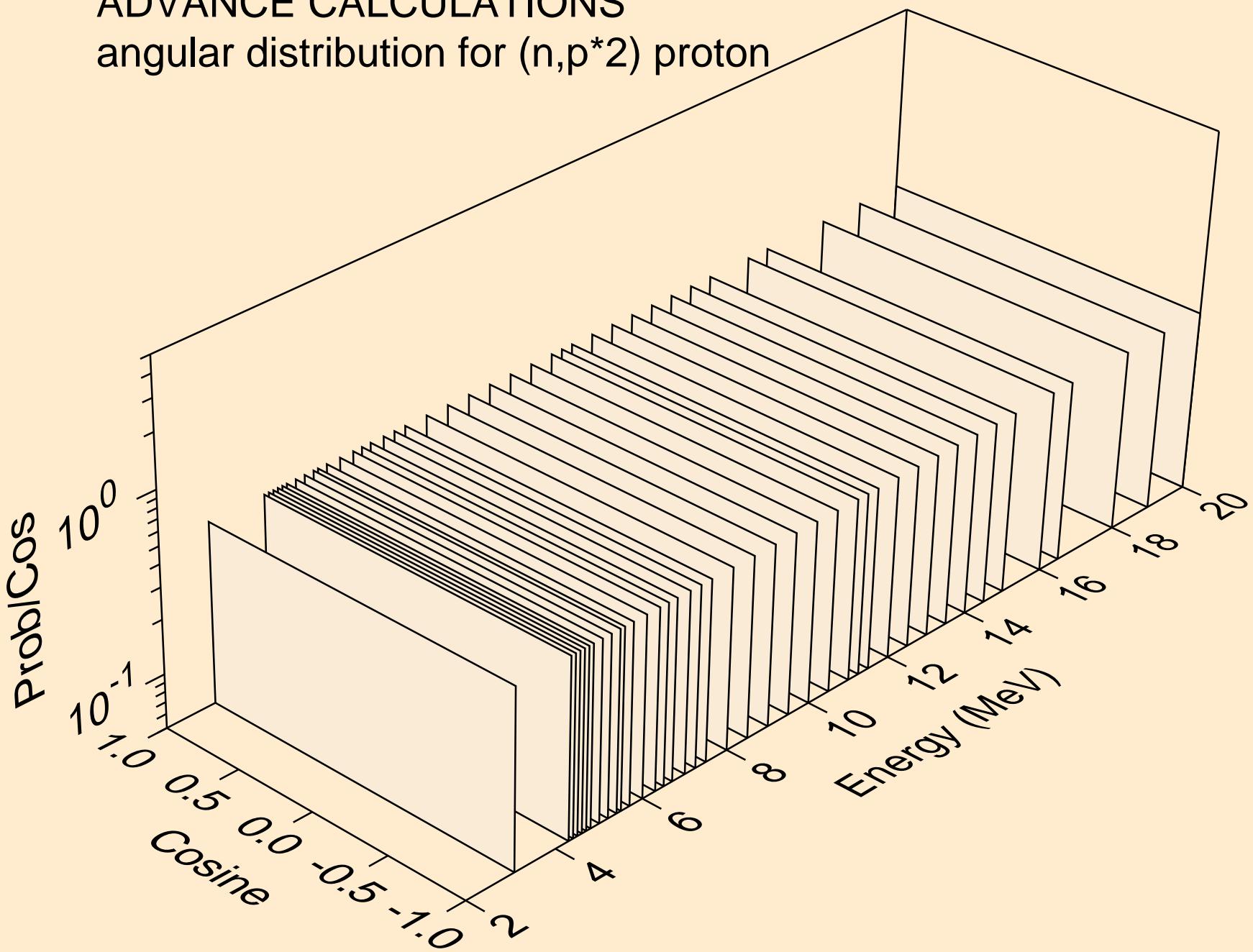
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*1$ ) proton



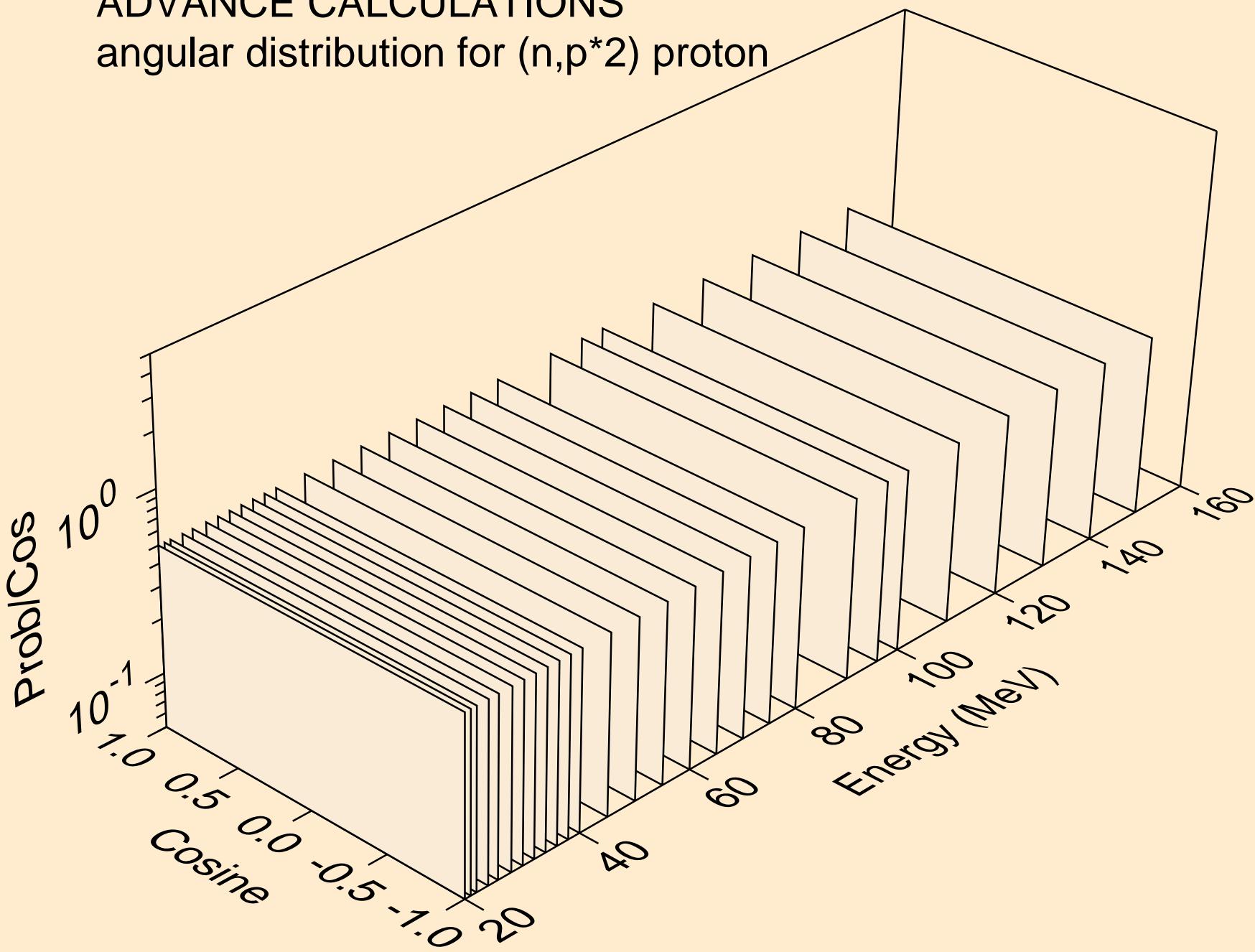
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*2)$ proton



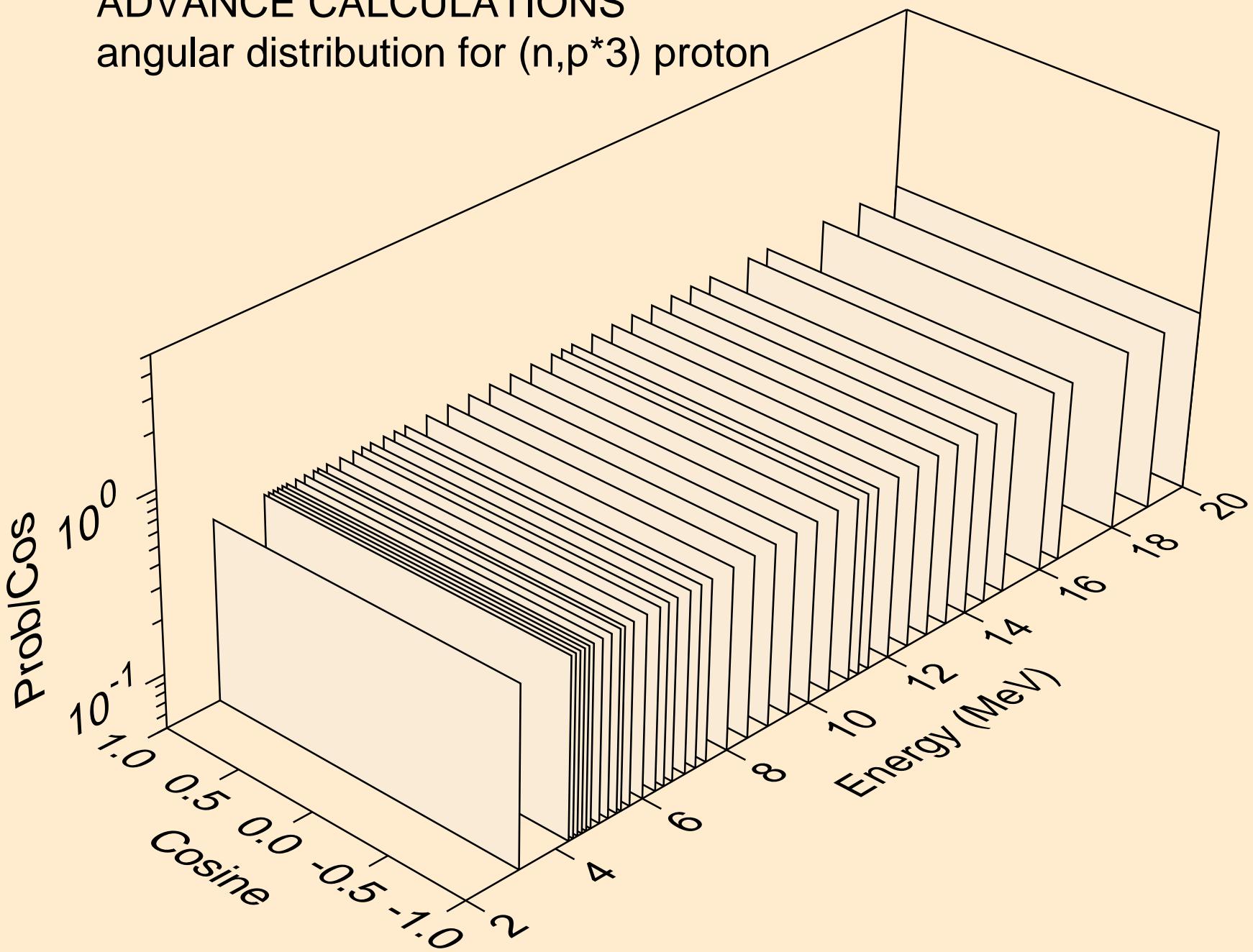
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*2)$ proton



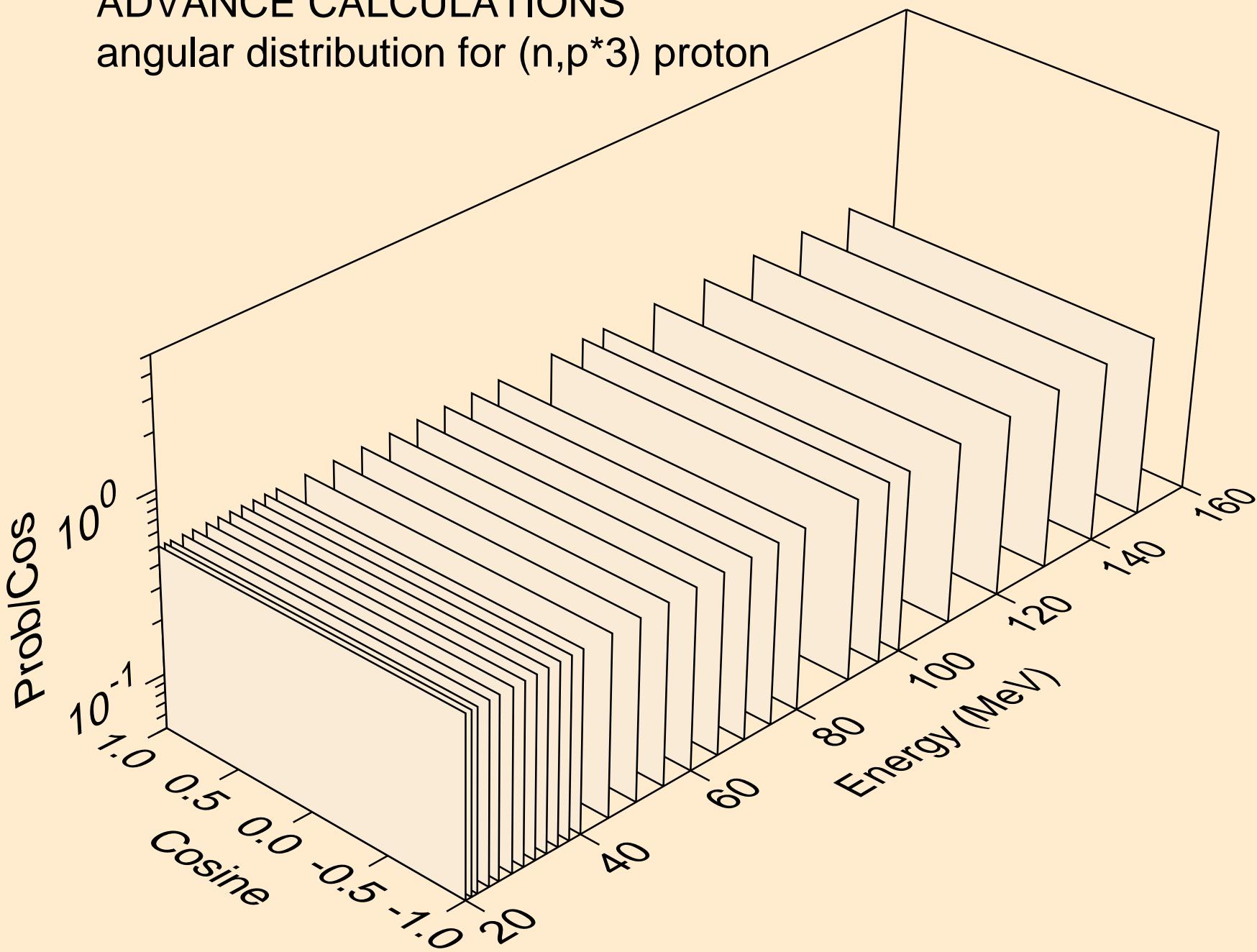
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*3)$ proton



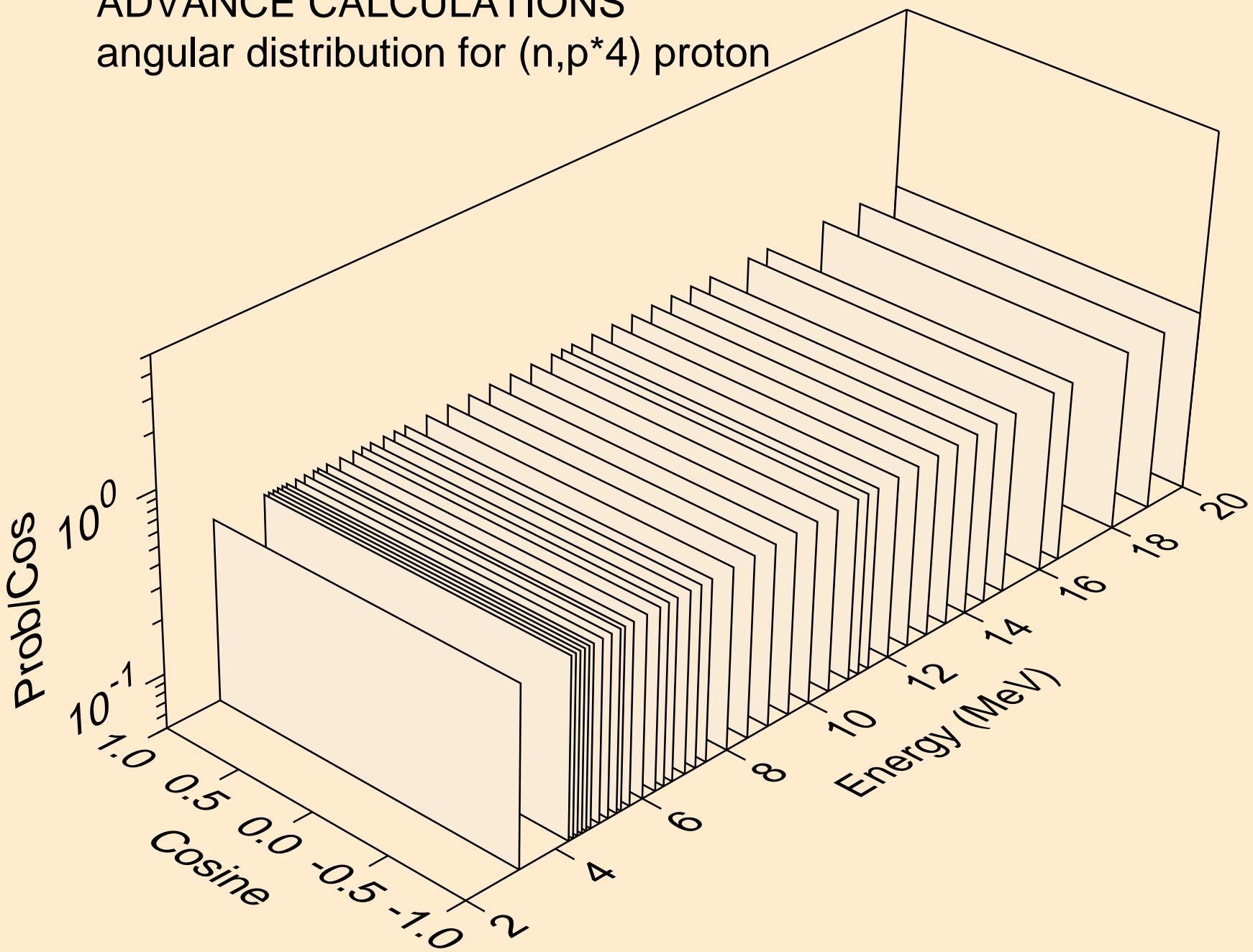
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*3$ ) proton



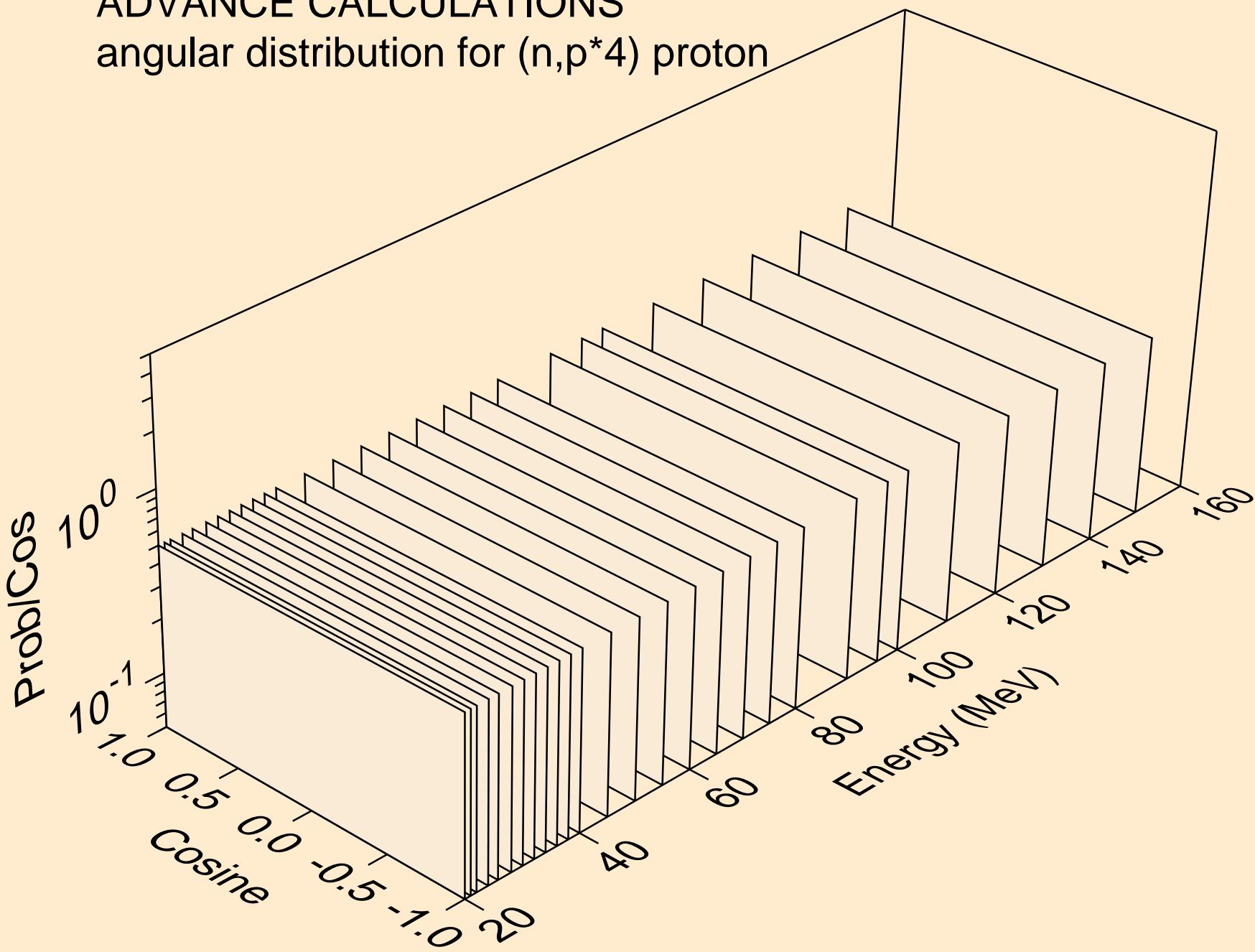
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*4)$ proton



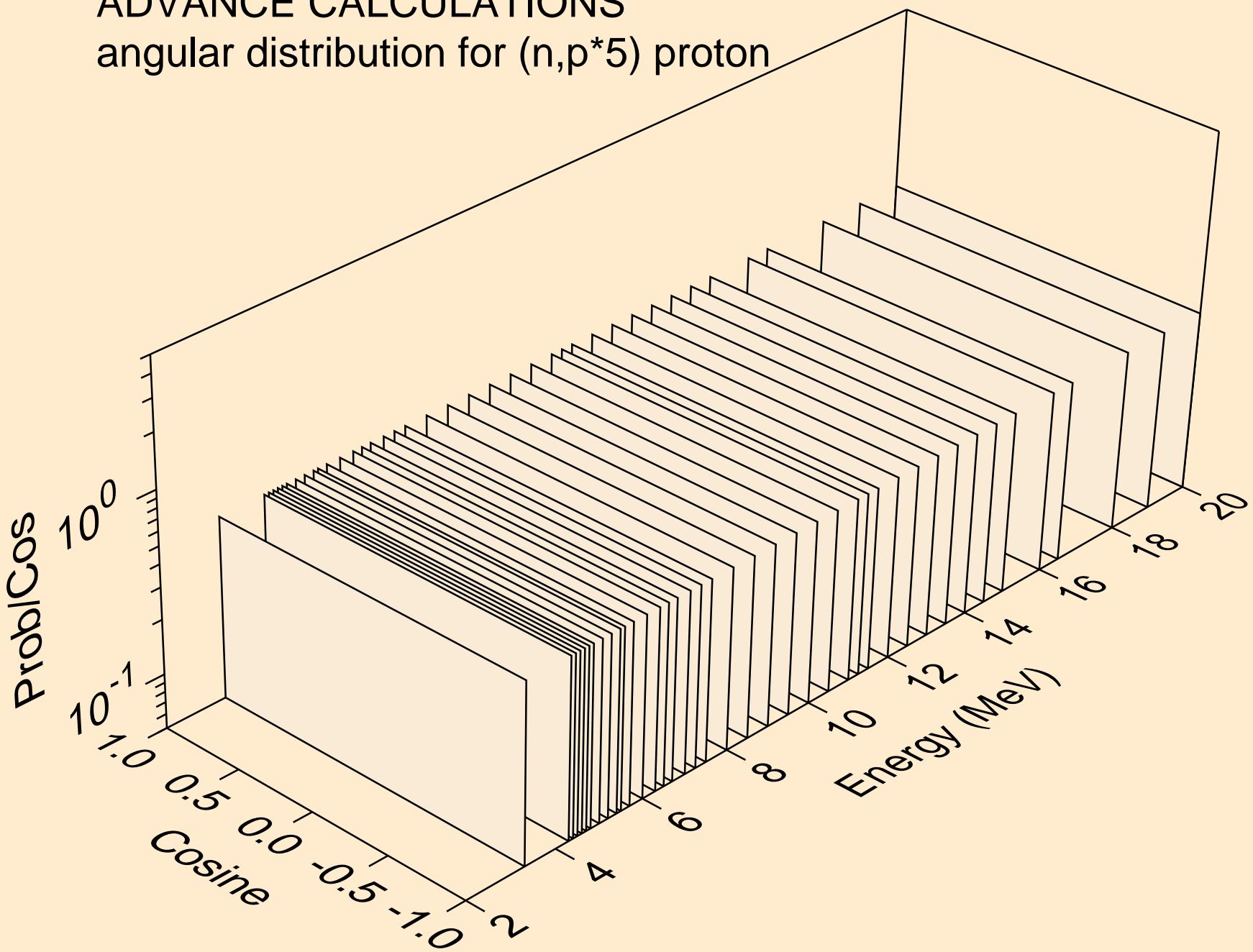
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*4) proton



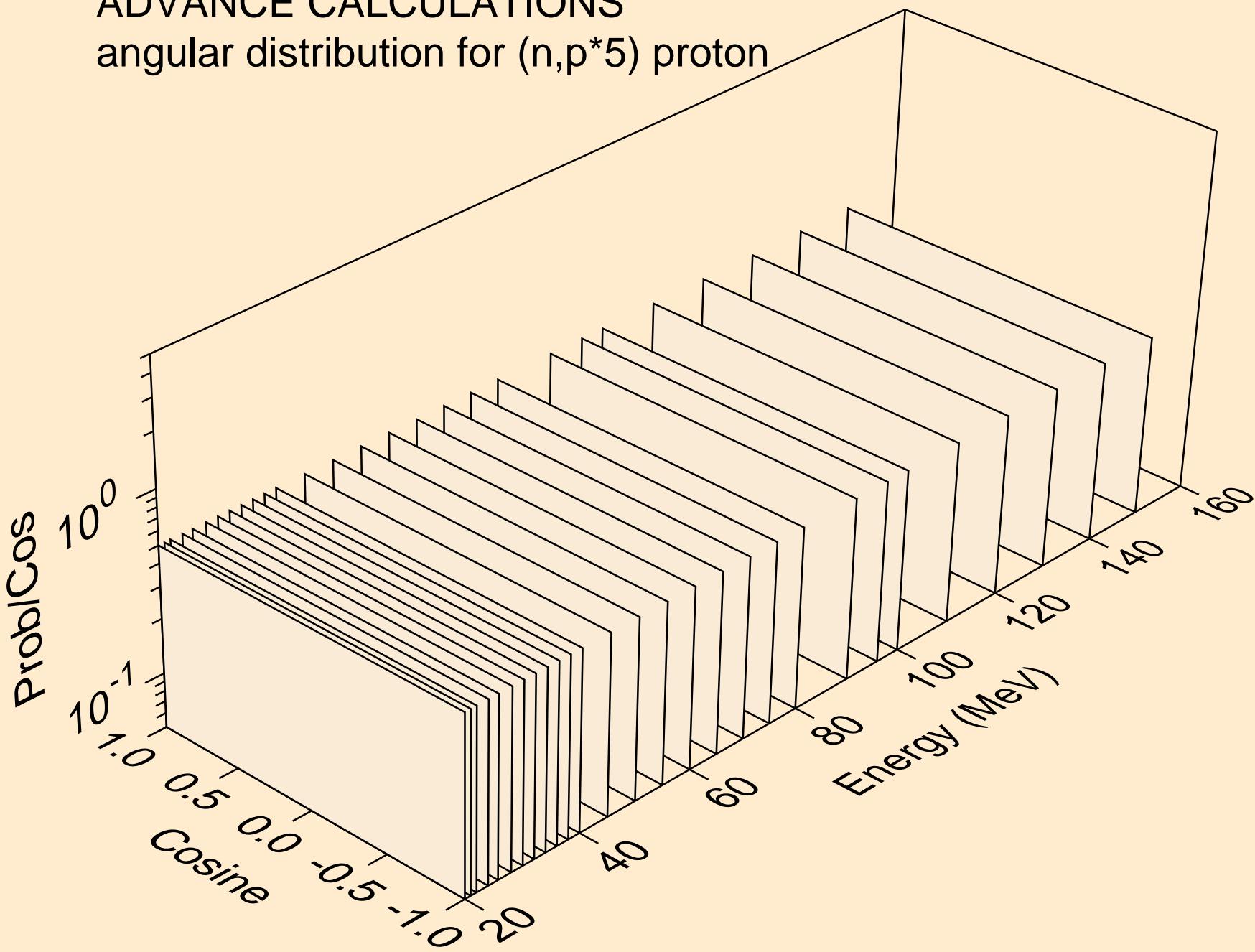
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*5) proton



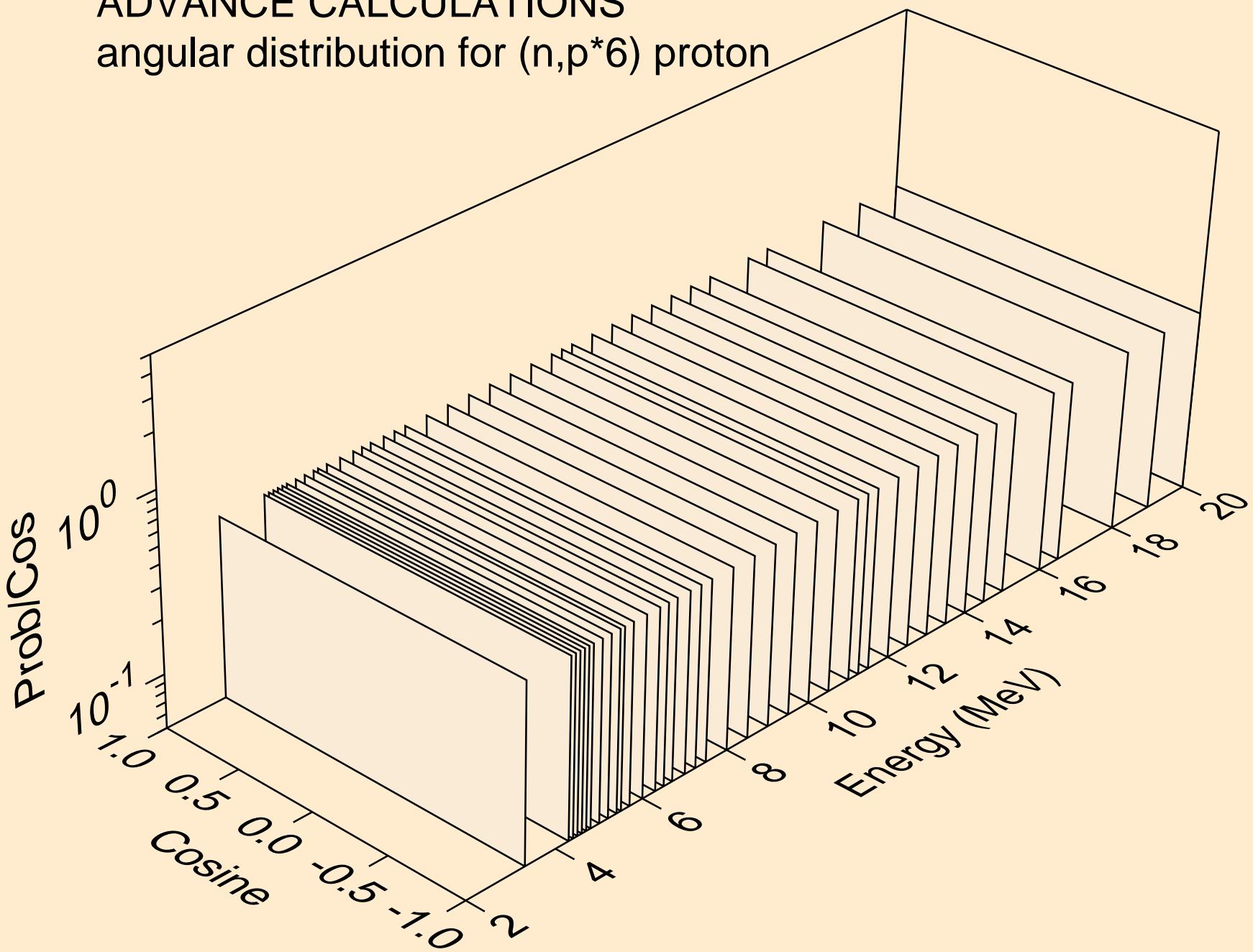
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*5$ ) proton



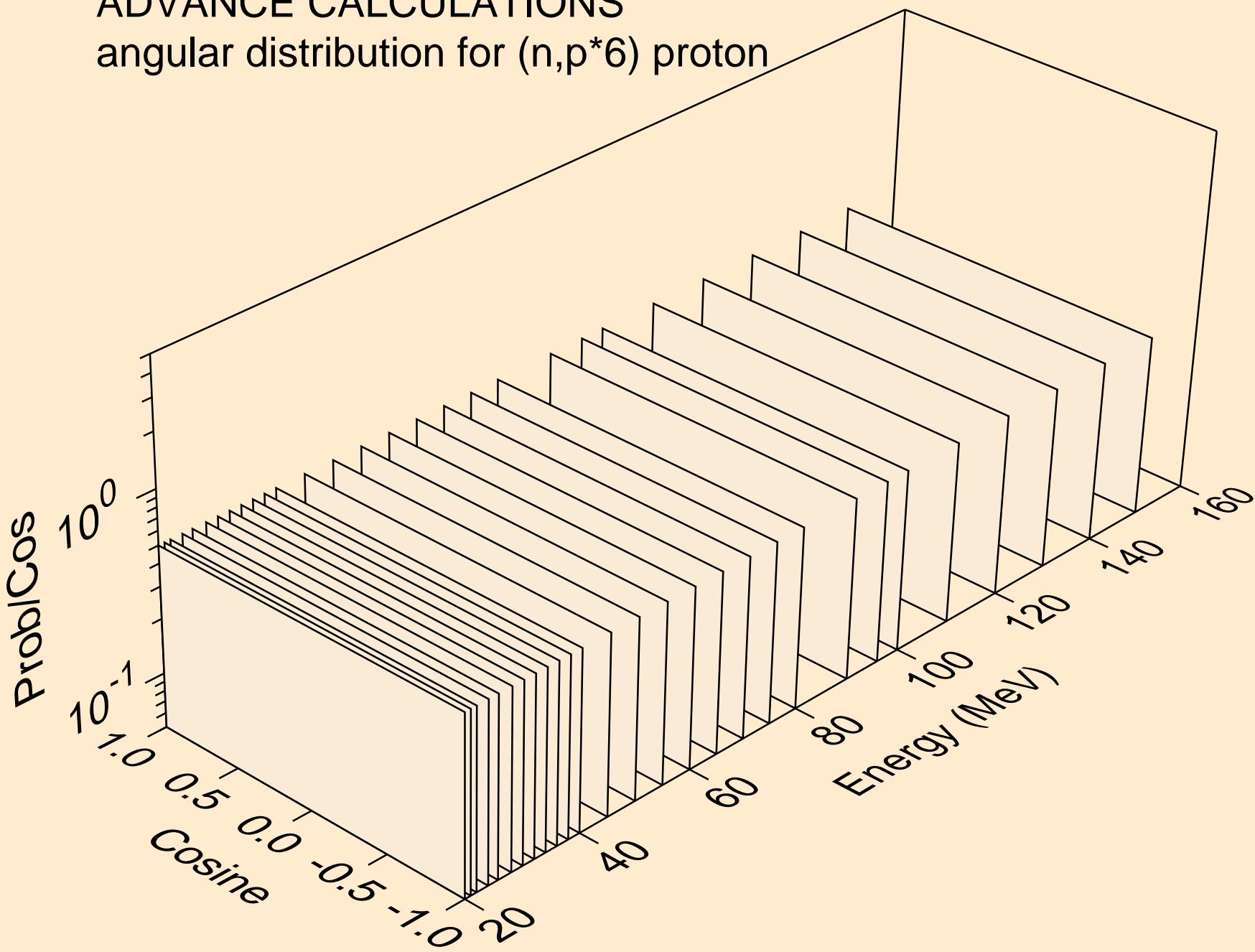
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*6)$ proton



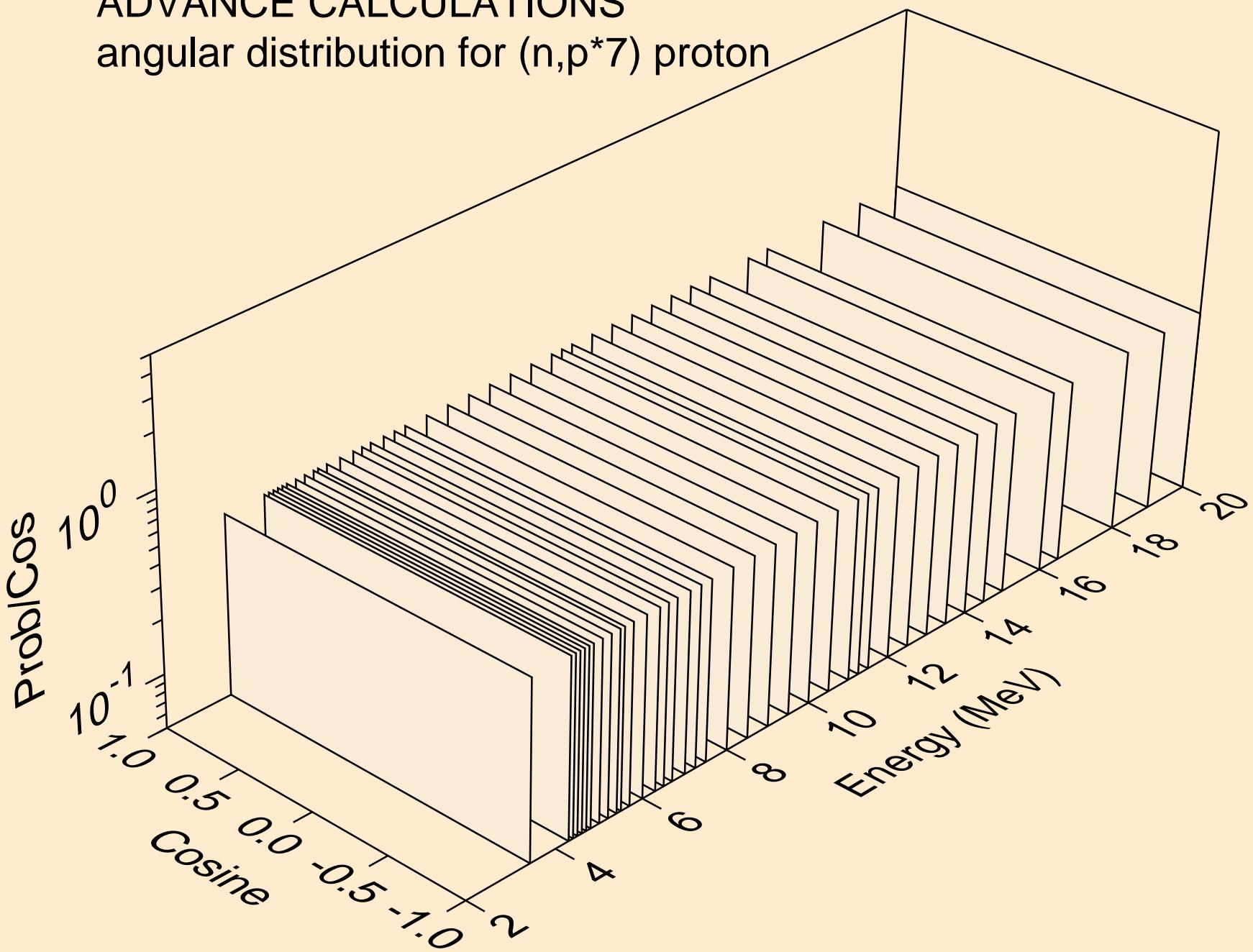
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*6$ ) proton



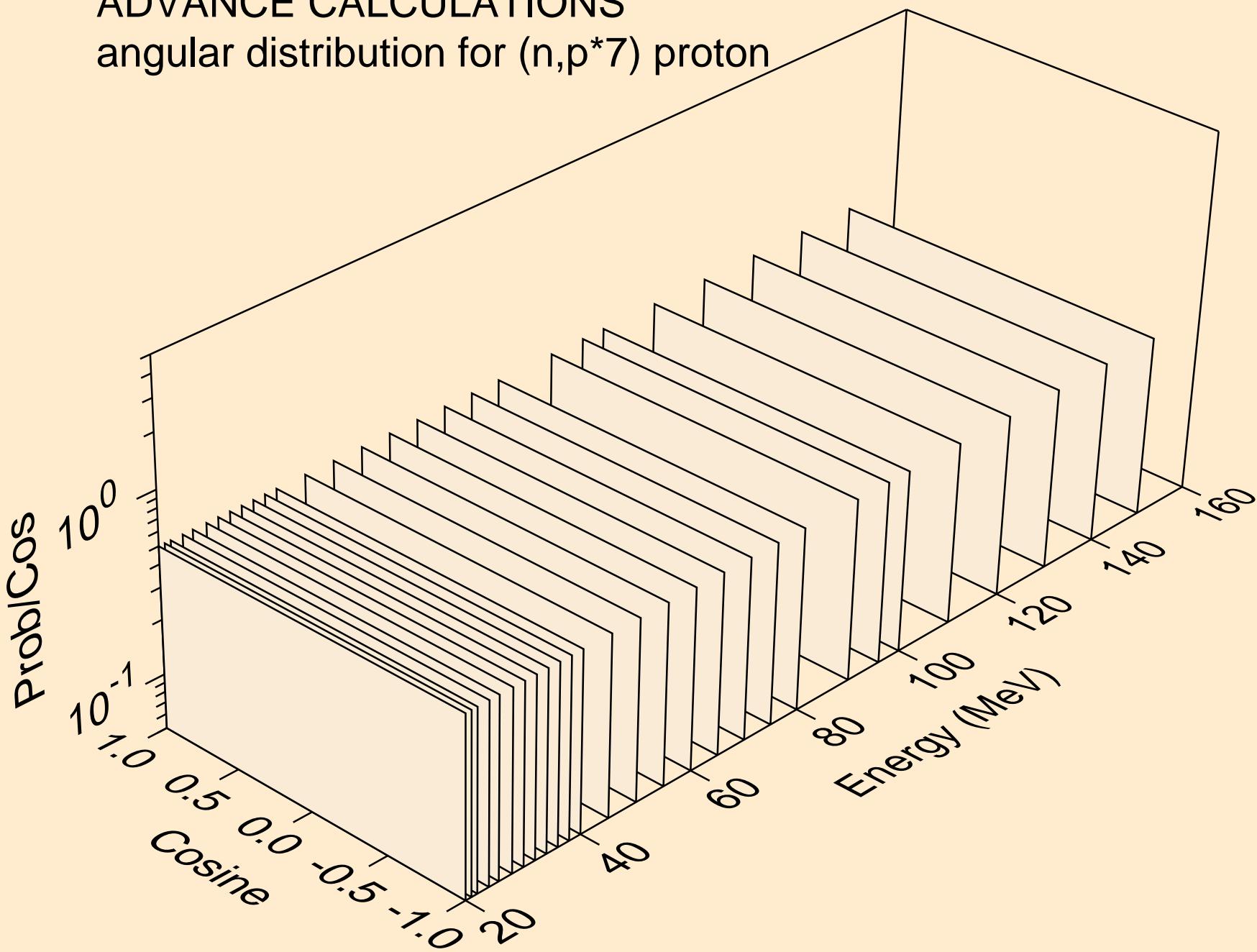
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*7$ ) proton



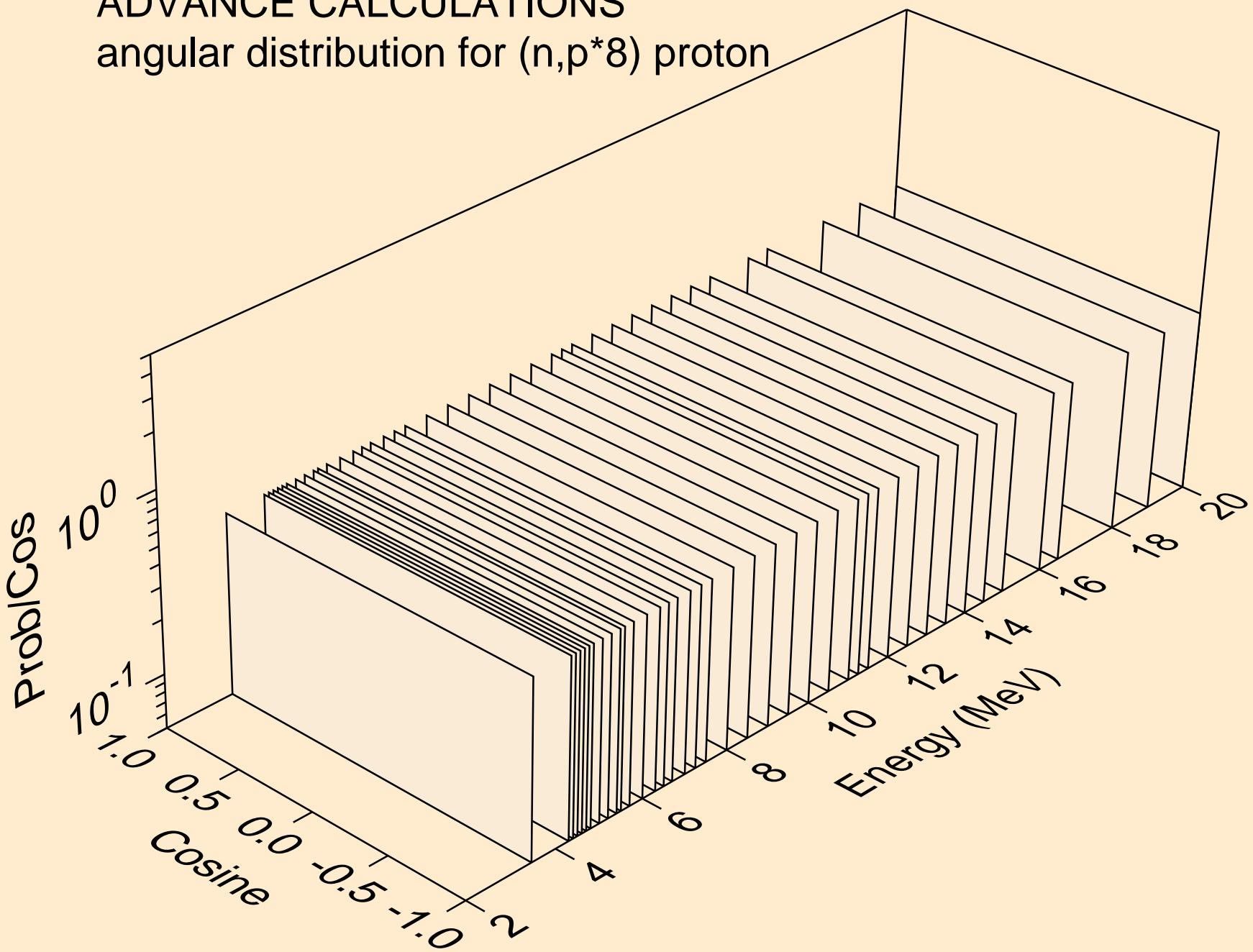
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*7$ ) proton



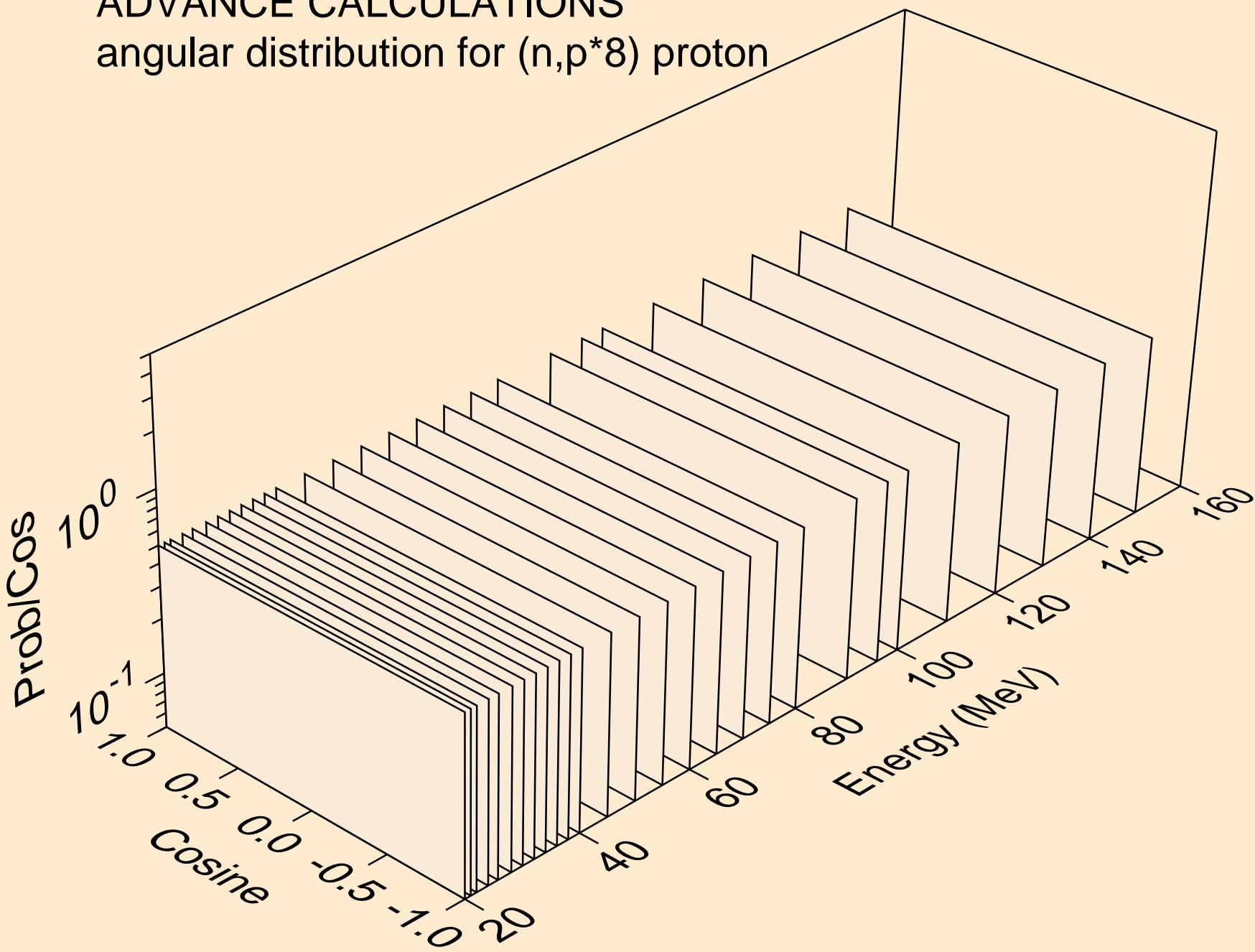
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*8) proton



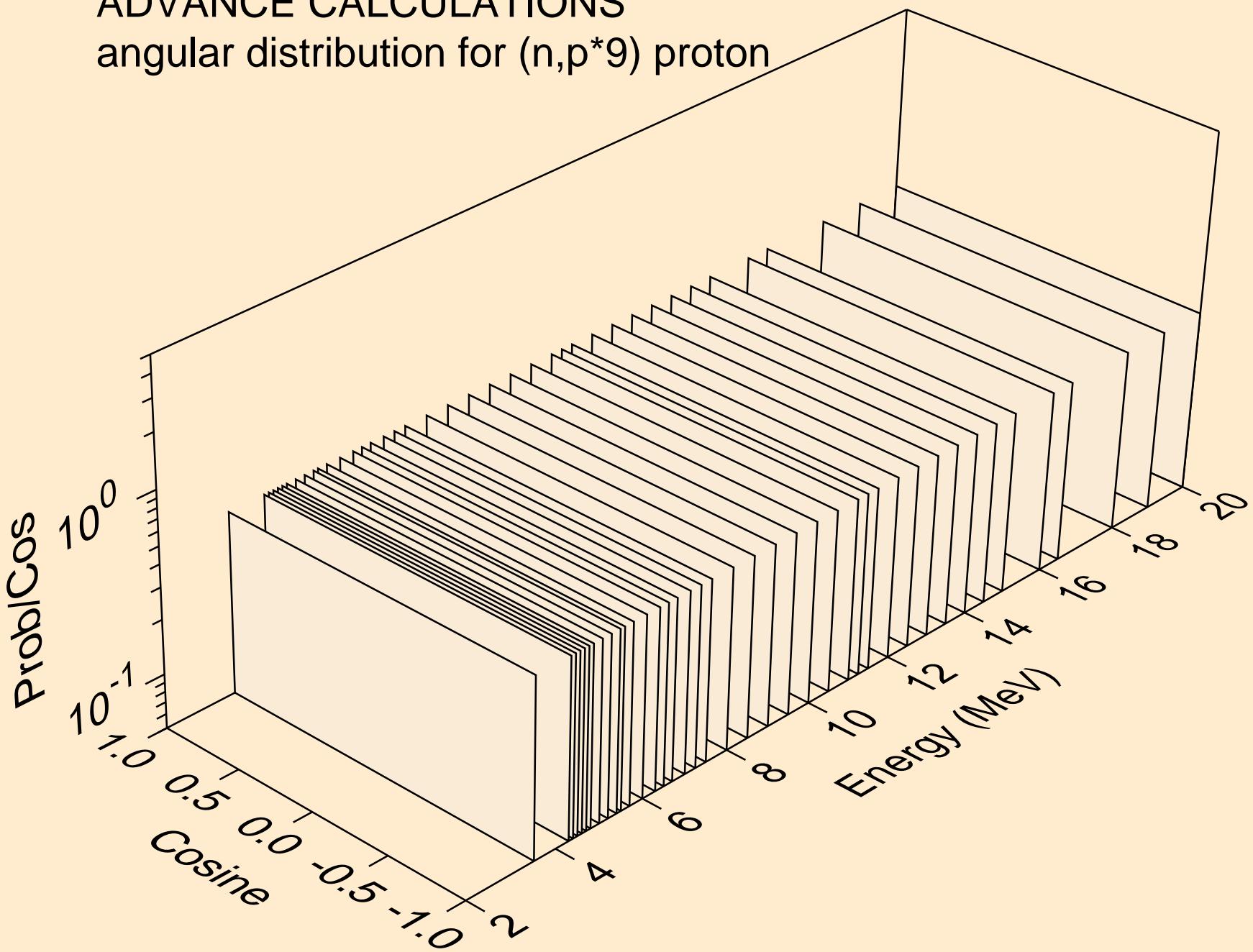
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*8) proton



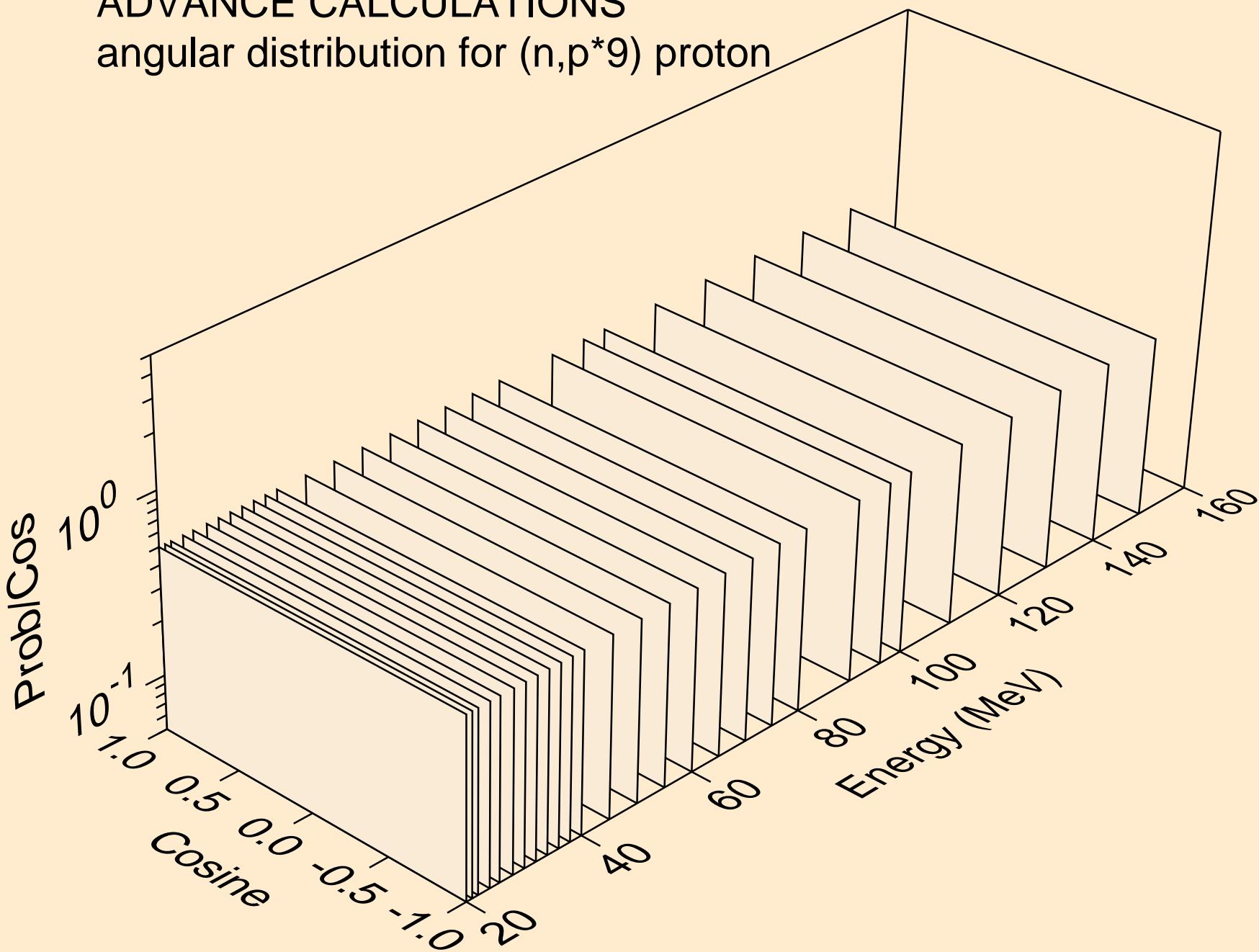
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*9) proton



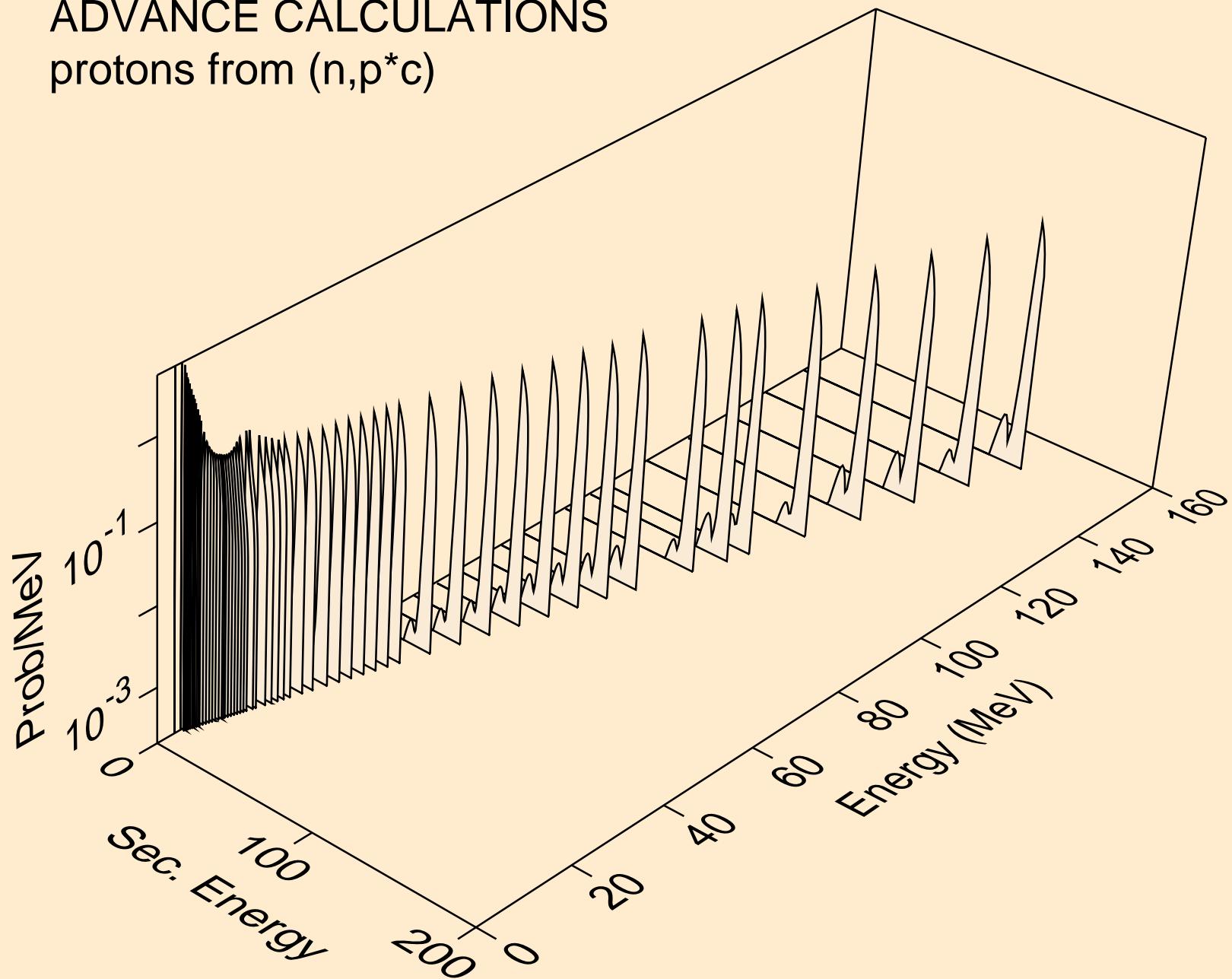
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*9) proton



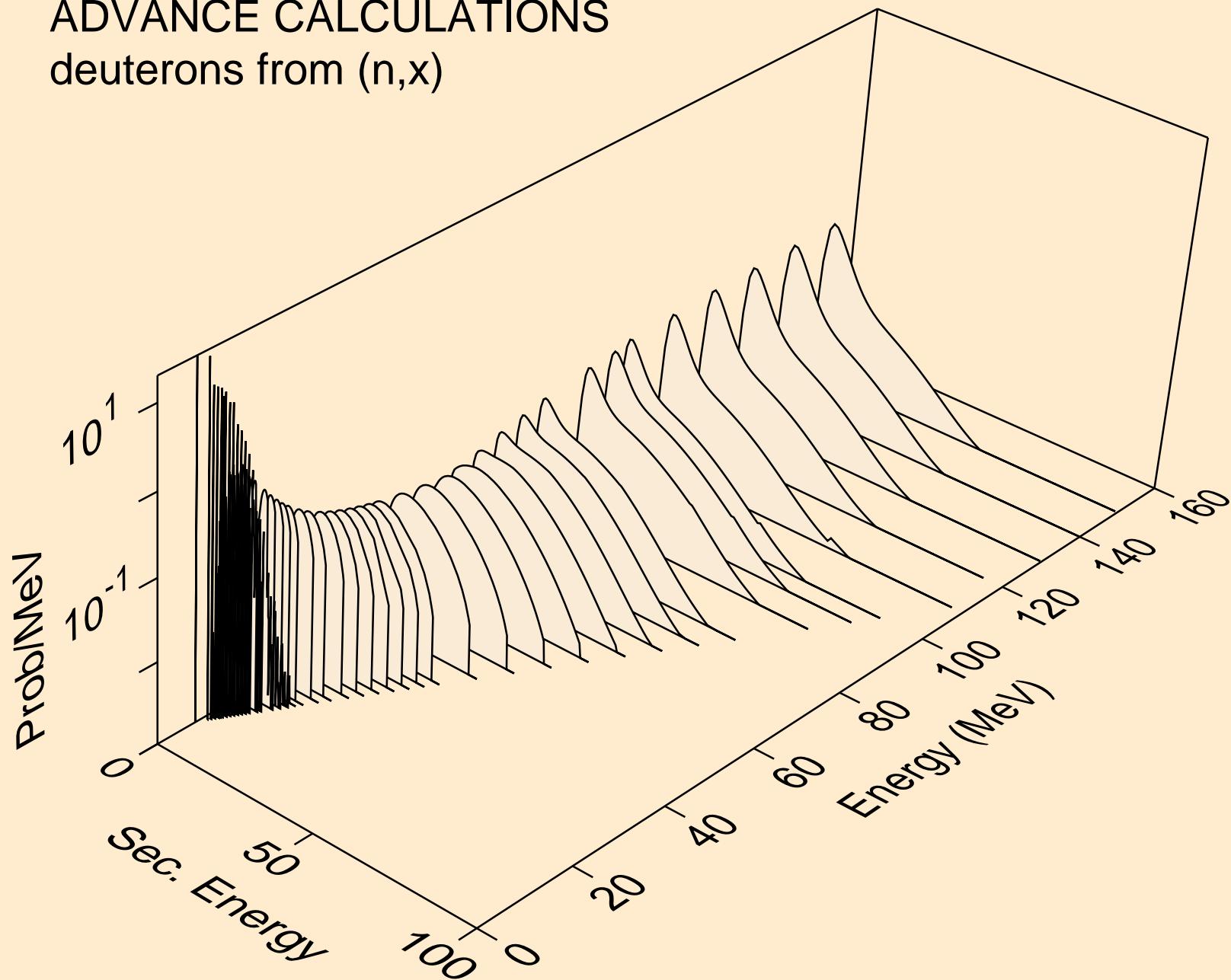
# ADVANCE CALCULATIONS

protons from  $(n,p^*c)$



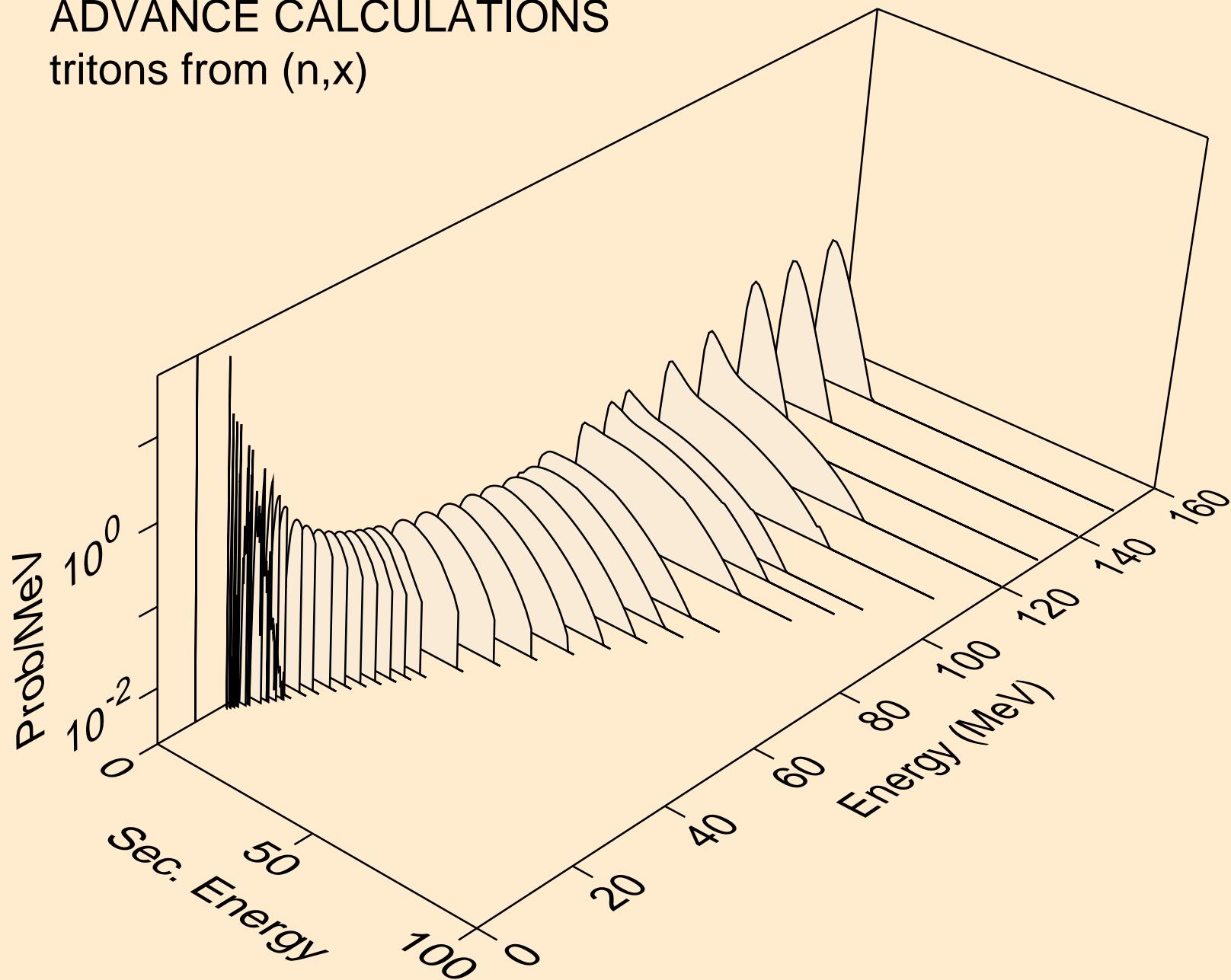
# ADVANCE CALCULATIONS

## deuterons from ( $n,x$ )



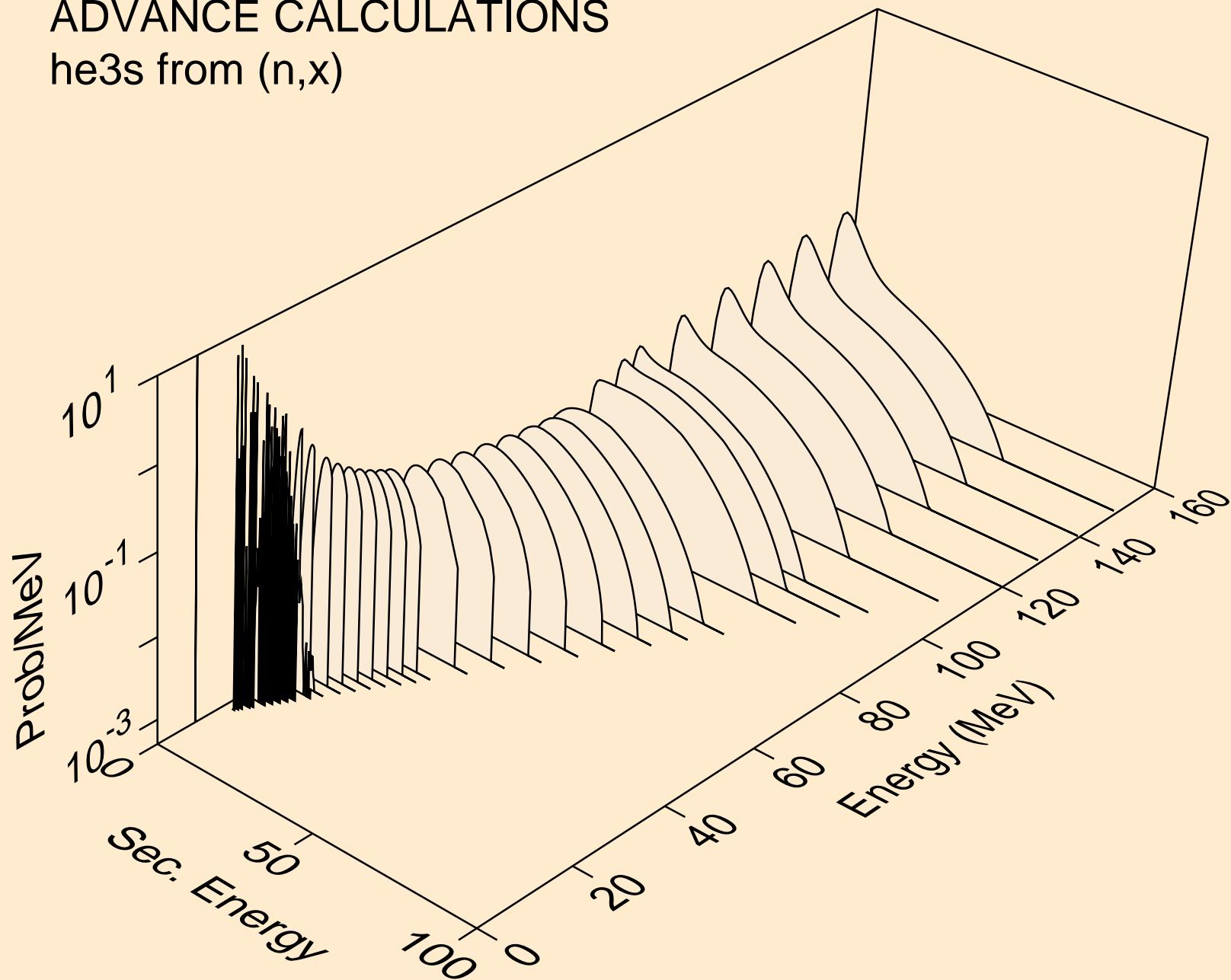
# ADVANCE CALCULATIONS

## tritons from (n,x)



# ADVANCE CALCULATIONS

## he3s from (n,x)



# ADVANCE CALCULATIONS

alphas from (n,x)

